



THE GUARANTEE AND SUBSIDY FUND:

GOALS, OPTIONS AND RECOMMENDATIONS EFS TECHNICAL REPORT NO. 20

December 15, 2005

This publication was produced for review by the United States Agency for International Development. It was prepared by Chemonics International Inc.

DATA PAGE

Activity Title and Number: Egypt Financial Services (EFS) Project

Contract No. 263-C-00-05-00003-00

Prepared for: CTO: Gregg Wiitala

DCTO: Ingi Lotfi

Economic Growth Division, Office of Financial and Information Technology, USAID/Egypt

Task: Task 1: Establish a Supporting Framework for

the Real Estate Finance Industry

KRA: KRA 1.1: Strengthen MFA's Institutional

Capacity to Supervise the Real Estate Finance

Industry in Egypt

Activity: Activity 1.4.4:Review current status of

guarantee and subsidy fund programs

Author: David Smith, EFS ST Consultant

EFS Library File: EFS Library/Technical Reports/REP#20 2005-12-15,

Smith, Guarantee and Subsidy Fund Goals, Options,

and Recommendations

List of Key Words Contained in Report:

Guarantee and Subsidy Fund (GSF)

Mortgage Finance Authority

Egyptian Housing Finance

Credit and Subsidy

Credit Enhancement

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

TABLE OF CONTENTS

1	EXECUT	TIVE SUMMARY	1
	1.1 Co	nfigure into two divisions: Credit and Subsidy	1
	1.3 Es	oritize Credit Division development and innovation ahead of Subsidy Divisi tablish complementarity with key market participants: Housing Lenders, lar	nd
	dev	velopers, and the Ministry of Housing	2
		nfirm GSF independence as a government entity in its own right	
		ake the first-mover products bond issues rather than securitizations	
	1.6 Su	mmary of principal recommendations	4
2	EGYPTI	AN HOUSING FINANCE TODAY AND THE GSF OPPORTUNITY	6
	2.1 Re	cent developments and the housing marketplace today	6
	2.2 Ho	using finance: rates, access, and inefficiencies	6
	2.3 Le	gal lacuna: lack of registered title to property	7
		arket evolution of 'Work-around' alternatives to registration	
		ortages of financial choices	
		gistration	
		stomer awareness and data	
	2.8 Re	nt control distorting effect	9
		nistry of Housing and New Urban Communities	
	2.10 Mo	rtgage Finance Authority	9
	2.11 Gu	arantee and Subsidy Fund	10
3	OVERAL	LL GOALS, STRATEGIES AND GUIDING PRINCIPLES	10
	3.1 Mis	ssion and gaps	11
	3.2 GS	SF's unique role and goals	11
	3.2.1	Market stimulation and development	12
	3.2.2		
	3.2.3		
	3.2.4	Low Income homeownership	14
	3.3 Bu	siness strategies	
	3.3.1		
	3.3.2		
	3.3.3 3.3.4		
	3.3.5		
	3.3.6		
	3.3.7		
	3.3.8		
	3.3.9	Subsidy activity, and the possibility of transfer to the Ministry of Housing	18
4	A MENU	OF OPTIONS: POSSIBLE GSF PRODUCTS AND SERVICES	20
	4.1 Ca	tegory 1: Stimulating the market	20
	4.1 Ca		
	4.1.2		
	4.1.3	Establish a property loan Liquidity Fund	25
	4.1.4	Insure loans over unregistered property with performance covenants	27
	4.1.5	Create a Housing Lender-funded default risk revolver	28

		4.1.6 4.1.7	Create a variable-accrual, capped-payment loan Take equity stakes in startups	
	4.2	Cate 4.2.1	egory 2: Moving low-income households into homeownership	
		4.2.1	Subsidize down payments	
		4.2.3	Initiate a 'Save for your home' down payment matching program	
		4.2.4	Buy down customers' net interest rate	
		4.2.5	Reward registration during homeownership	38
		4.2.6	Create a register-into-refinancing program.	
		4.2.7	Create a shared-appreciation loan vehicle	
			egory 3: Operating businesses	
		4.3.1	Co-developer of mid-market homes	
		4.3.2	Landlord with property inventory	41
			egory 4: Reforming the market	
		4.4.1	Create a "Financing Choice Law" that requires all forms of property financing r mortgages, not just registered title to report as such to MFA	101 Just
		4.4.2	Bring MOH New Urban Community properties into the Financing Choice Law	
		4.4.3	Require New Urban Communities properties to have registered title	
		4.4.4	Make a single national entity the repository of all government-owned homes	
		4.4.5	Encourage 'market clearing' of the unoccupied inventory	44
		4.4.6	Vacancy or voluntary decontrol on rent control	
		4.4.7	Registration fee 'holiday' or 'discount holiday'	
		4.4.8	Professional rental sector	45
5	REC	СОММ	ENDATIONS	46
	5.1		vities, Products and Services	
	5.2	Stra	tegies and Principles	46
	5.3	Orga	anizational configuration	
		5.3.1	GSF as independent entity	48
		5.3.2	Establish two divisions within the GSF: Credit and Subsidy	
		5.3.3	Brief functional description of disciplines	48
6	TIM	ETAB	LE FOR ACTION	51
7	COI	NCLU:	SION	52
- \	(1 IIIDI	T 4. OI	OCCARY OF TERMS, REFINITIONS	5 4
			LOSSARY OF TERMS; DEFINITIONS	
			HE EGYPTIAN HOUSING FINANCIAL ECOSYSTEM TODAY	58
ĽΧ	ישופו		NABLING LEGISLATION AND REGULATION AFFECTING THE JARANTEE AND SUBSIDY FUND	60
Ε¥	'HIRI		AXONOMIC EVALUATION OF SELECTED GSF BUSINESS LINES	
			OTENTIAL FOLLOW-ON ACTIONS CONSISTENT WITH STRATEGIC	1 2
_/`	וטוויי		=COMMENDATIONS	83

1 Executive Summary

As requested, this Report and this Executive Summary outline our recommended business plan for the Guarantee and Subsidy Fund.

Established in 2004,¹ the Guarantee and Subsidy Fund (GSF) is intended to expand housing affordability for moderate and low-income Egyptian households, using either or both of two broad activities:

- Guarantee. Use the government's credit-enhancing capacity to provide guarantees
 for financial instruments, whose effect is to lower the effective net cost of debt to
 target households, and hence increase their ability to access housing finance and
 acquire good homes for their families.
- 2. **Subsidize**. Use the government's *equity capital* to provide a direct subsidy for the benefit of *low*-income households.

Both of these goals are laudable. Both are important in Egypt today. Yet they are distinct. They imply different activities and different functional organizations. They have different capital requirements and flow profiles. They have very different capital profiles (money deployed by the government) and very different net capital costs.

Meanwhile, the GSF itself is an organization in its early stages of development. It has no proven sustainable business lines and is tightly constrained liquidity-wise. It must choose its business activities carefully and grow its organization economically to self-sustainability before it can allow itself the luxury of branching out.

For clarity, and because some of the financial concepts expressed in this report are new to Egypt, we believe it important to use terms that are precisely defined, as listed in a Glossary provided as Exhibit 1 of this report. Such Glossary-defined terms are presented in initial capital letters.

1.1 Configure into two divisions: Credit and Subsidy

We recommend the GSF configure itself as two divisions each with its own primary mission and interactions:

- The Subsidy Division will work exclusively with low-income customers and almost always access Credit Division financial products.
- The Credit Division will work across the moderate and middle market, predominantly without accessing Subsidy Division resources except for its submarket of low-income households.

This separation of organization is key.

The Subsidy Division will always consume funds and can never be self-sustaining. With the Credit Division's theoretical and unproven capacity, it would be a burdening of the Credit Division to ask it not only to establish itself in the marketplace, but also to make a profit so quickly that it can also become a charitable donor to the Subsidy Division.

¹ The Real Estate Finance Law (Law 148 of 2001) was enacted in 2001; the presidential decree (No. 4 of 2003) establishing the GSF's powers was published in 2003; the GSF's articles of association were approved in 2004; and the ministerial decree amending executive regulations in March, 2005.

Accordingly, Credit Division activity must lead the GSF, with Subsidy Division activity following, as resources are available. (As an alternative, control of the Subsidy Division could under some circumstances be shifted to the Ministry of Housing, a possibility discussed in Section 3.3.9.)

1.2 Prioritize Credit Division development and innovation ahead of Subsidy Division

Since the Subsidy Division needs the Credit Division but not vice versa, we recommend *accelerating Credit Division development* ahead of Subsidy Division, for three reasons:

- Marketplace compatibility. Credit Division activities will support broader housing finance markets and overall EFS goals. Subsidy Division activities will tend to be isolated and lack this synergy.
- GSF drive to self-sufficiency. Credit Division activities will have faster marketplace
 acceptance, larger volumes, and offer the prospects of short-term profitability and
 long-term stability. Subsidy Division activities are necessarily ongoing consumers of
 cash. The GSF does not have the luxury of pursuing expansion of a Subsidy
 mandate until after it has demonstrated a viable business model and assured its own
 economic self-sufficiency.
- 3. **Building blocks**. Credit Division products are a precondition of effectively deploying Subsidy Division products. The reverse is not true.

The Subsidy Division's counterparties are individual Egyptian households. The Credit Division's counterparties will be housing sector participants. This is quite a different business relationship model and leads to the next area of GSF positioning.

1.3 Establish complementarity with key market participants: Housing Lenders, land developers, and the Ministry of Housing

Housing Lenders, land developers, and the Ministry of Housing can all benefit -- very quickly and very substantially -- from financial products the GSF's Credit Division can create. Establishing these three groups as counterparties -- business partners if you will -- early in the process will cause them to ally with the GSF on programs of shared benefit.

The GSF should see its role as:

- Program/ product origination, not deal flow. The GSF should focus on creating new loan programs and products rather than creating its own deal flow.
- Wholesale, not retail. It should work in bulk on loan programs and products, not at the scale of individual homes and loans.
- Partnering with counterparties. Rather than being directly in business itself, the GSF should lever its programs and products through existing networks (developers, Housing Lenders, and the Ministry of Housing) that will want to use GSF products and services. This aligns the GSF at a different place in the value chain, complementary to rather than competitive with these established participants.
- Primary, not secondary market. The GSF's goal should be to stimulate the growth of
 primary financial markets (new issues of housing loans broadly and mortgages
 narrowly) rather than to be the universal secondary market maker for an industry that
 already has ample primary flow. This means that the GSF may create large bond
 issues but it need not advance into securitization. Sales of whole loan pools on a
 syndicated basis to large institutional buyers will be a sufficient and achievable
 execution.

Financiers, not operators. The GSF's competitive advantages and scarce resources
are its government platform, mission (and therefore risk/ reward tolerance), and noncompetitive role (as a market facilitator rather than a market competitor). These
assets can be effectively deployed without being an operator (developer, owner, or
manager). Instead, the GSF can be a success by simply being a fund.²

1.4 Confirm GSF independence as a government entity in its own right

Since the MFA and GSF share the same chair, it has been suggested that the GSF ought in some way be related to the MFA, financially or through regulatory oversight. To the contrary, we believe the GSF should be an entirely independent entity.

The Mortgage Finance Authority is an important new agency in its own right. As the national regulator of an industry sector that must grow and can grow, it plays an essential role in protecting the Egyptian housing financial ecosystem. But a role that is inherently regulatory is quite different from a role as a market participant and market innovator. Indeed, it invites confusing both agencies as to the proper boundaries of regulator and program participant, and it risks creating a real and perceived conflict of interest that could fatally undermine the MFA's ability to be a strong fair regulator of the larger industry.

At the same time, the GSF also benefits from the ongoing 'mortgage surtax' revenue stream (2% of all payments on registered mortgage loans) whose growth depends on the success of the MFA's activities in expanding and regulating the mortgage market. As overseer of this funding stream, the MFA thus has valid standing to review where the money it is raising will go, and to what uses that money will be put.

We thus recommend the GSF be entirely independent of the MFA, except that the MFA chair should be a non-executive board member of the GSF, just as the GSF board should have *ex officio* members from the Ministries of Finance, Housing, Investment, and Justice.

The current GSF board is well constituted and shows an exemplary commitment to the GSF's larger mission. These distinguished and motivated individuals should be supplemented with the *ex officio* nominees indicated above.

1.5 Make the first-mover products bond issues rather than securitizations

The Egyptian housing financial ecosystem today is characterized by blockages, gaps, and Work-arounds. The GSF's first moves should tackle these directly. Very briefly:

- Blockages. Registration of properties is difficult, expensive, unvalued, and hence infrequent.
- Gaps. There are surprisingly few types of housing financial products and very few Housing Lenders.
- Work-arounds. Because business must be done despite limited registration and a
 dearth of classical housing loan types, the marketplace has developed alternative
 lenders (developers, Ministry of Housing) who are offering housing loans in different
 guises (e.g. installment sale contracts with 'fixed' prices).

These Work-arounds are sub-optimal, but they work, and customers tolerate them because there are no visible superior alternatives. This leads to a conundrum -- customers do not want what they have not got, and it will be hard to create new alternatives until customers

² The GSF could also, once it had established its baseline capacities, become a limited partner or financial partner in development schemes. It would do this through legal and financial structures to create public-private partnerships in which the GSF was a non-controlling or contingent-controlling participant, as opposed to being a controlling partner or direct operator.

want them. So government generally, and the EFS program specifically, are seeking to stimulate the market by using government intervention with motivations beyond direct economic return.

The GSF's first-mover Credit Division products should do the following things:

- Liquefy capital on the balance sheets of Housing Lenders, land developers, and the Ministry of Housing.³ This activity has been sometimes described by Egyptian stakeholders as 'liquidity funding,' a term that we would prefer to phase out of usage.
- Create a bond issuing capacity to place large issues into the capital markets. (This
 does not require securitization and we advise against pursuing securitization at any
 early stage.)
- Introduce new financial products to diversify the range available to Housing Lenders.

Reasons for this recommendation are presented, together with some diagrams illustrating the choices, in Section 4.1.

1.6 Summary of principal recommendations

They are summarized on Table 1 below.

3

³ Depending on the interest rates of the financial assets these entities now hold, that liquefaction could be at a discount to par -- for Ministry of Housing loans, a substantial discount. Such discount is merely the reflection of economic reality so ought to be economically desirable but may for one group or another be uncomfortable. That is for those entities to sort out for themselves.

Table 1 Abstract of principal recommendations

We recommend the GSF take the following actions as promptly as practical:

- 1. Establish two distinct divisions within the GSF:
- A Credit Division to handle guarantee/ credit enhancement activities
- A Subsidy Division to deliver direct grant-like benefits to targeted low-income households.
- 2. Make self-sustainability a core priority. The GSF must identify, demonstrate, and institutionalize activity that enables it to sustain itself as an independent government-sponsored enterprise.
- 3. Independence from the MFA. Although the MFA should sit on the GSF's board, the two organizations each have distinctive niches, gain no particular synergies from association with one another, have few overlapping skill sets, and might if linked be subjected to unnecessary conflicts of interest. Position the GSF as an entity entirely independent of the MFA, self-sufficient and reporting to the Ministry of Investment, but with a board that supplements the current strong board with appropriate representation from affected ministries (Finance, Housing, Investment, and Justice).
- 4. Activate the guarantee/ credit enhancement function first, with subsidy as a second priority. Guarantee/ credit enhancement can more quickly make a positive impact across the broad Egyptian housing financial ecosystem, is more likely to have immediate marketplace impact, can be self-sustaining and indeed profitable, and has more customer demand.
- 5. Tailor the **subsidy role to targeted incremental initiatives** related particularly to lowering the cost of debt service for first-time homebuyers who are low income.
- Fund the Credit Division internally using the GSF's current balance sheet and
 endowment, plus self-sustaining profits and cash flows to be earned on Credit Division
 products and business lines. Fund the Subsidy Division externally, through sources
 that may include GOE budget line items, donor and multilateral grants, and domestic
 charitable sources.
- 7. Do not insist that the only security the GSF will enhance must be registered title or registered deeds, as to do so will so narrowly constrict the GSF's universe as to mute its impact. Instead, finance unregistered properties, using a tiered range of pricing and terms to give substantial advantages to registered properties and mortgage security but not to exclude unregistered instruments.
- 8. On the guarantee/ credit enhancement side, **become an aggregator/ bond issuer** with the goal of liquefying and backstopping Housing Lenders, who will become the GSF's principal customers/ counterparties and who should be willing to provide equity capital (or compensatory deposits/ membership fees) for participation in a shared liquidity/ bond issuing vehicle.
- As first products, offer (a) a credit enhancement loan guarantee capacity that pools
 developer loans as collateral for a housing bond, and (b) a shared-appreciation loan
 innovation that can be originated through Housing Lenders and then on-sold to the GSF
 (which in turn will package it into bond issues).

A brief timetable to implement this strategy is sketched in Section 6 below. A detailed list of follow-on actions consistent with these recommendations is provided in Exhibit 5.

2 Egyptian Housing Finance Today and the GSF Opportunity

Our perspective on the Egyptian housing finance marketplace today is based on information gleaned from stakeholder interviews, Egyptian government reports, and private sources. A complete exposition of the ideas in this Section is provided in Exhibit 2. We present them here because recommendations must spring from a factual basis, so we are setting forth what we understand to be the relevant facts today.

A nation of 73 million people, most of whom occupy flats in cities that are themselves continuing to grow, would ordinarily support a burgeoning market in mortgage loans. Yet the Egyptian mortgage finance industry is in its infancy, behind that of many countries with smaller economies.

The causes are well-documented blockages in Egyptian housing finance -- titling, registration, confiscatory rent control. Not only have these locked up much of that capital, they also have thwarted development of the normal range of professional services and capacities -- housing finance companies, mortgage brokers, appraisers, credit bureaus, and settlement agents -- that would allow a housing financial marketplace to spring rapidly into being. Equally significant, 'Work-arounds' developed in the marketplace allow a system of sorts to function at a level of reduced efficiency. While understandable, this makes harder the task of establishing a more efficient system, as not only must new schemes be put in place, customers (at all levels) must be persuaded to use them.

This section reviews the conditions, policies, players and norms to consider the GSF's role and business strategies.

2.1 Recent developments and the housing marketplace today

With the extraordinary urbanization taking place in Egypt, the extreme shortage of normally arable land (less than 3% of the total area) and the resulting priority on high-yield agriculture, the natural and continuing result is that Egyptian formal housing is, in the main, mid-rise (4-6 stories) and high-rise blocks (6-25 stories) of flats, which have been built in metropolitan Cairo for at least a hundred years. It is the preferred and presumed housing configuration among Egyptians and certainly among Cairenes, who tend to occupy their homes for very long intervals (by world standards) because of inflexibility of configuration, tenure, and financial alternatives.

Four years ago, Egypt was in a recession (it has since recovered and the economy is growing), yet the pace of new construction in greater Cairo, especially of residential property, continued apace. The net result is a massive overhang of unoccupied homes -- estimates range from 1.0 to 1.8 million properties -- despite a chronic housing shortage, and a mismatch between production and need. The overhang represents a huge area of uncertainty which must complicate and potentially destabilize property markets even as they recover.⁴

2.2 Housing finance: rates, access, and inefficiencies

Structured finance as known in more developed nations is in its infancy in Egypt. Blockages in the real estate financial markets have prevented the development of domestic capital-

⁴ Unfortunately, there is no intervention currently available to the GSF or the MFA that can materially mitigate the market-destabilization risks that may arise from any massive movement in the unsold inventory. It must, therefore, be monitored with the greatest alertness.

markets and securitization industries and local expertise. Treasury rates are commensurate with real inflation, and over the last several years they have been trending slowly downward. Rates for housing finance are expensive:

Table 2.2 Interest rates on real estate financial transactions (generally unregistered)

<u>Rate</u>	<u>Term</u>	Spread over Treasury	<u>Constant</u>
12-14%	3-7 years	500 basis points	21-41% (!)

At roughly 500 basis points over like-term Treasuries, these rates are probably higher than would normally be expected in a country with a similar underlying configuration of interest rates and inflation expectations. This suggests that the impairments to housing finance are affecting not only the availability of capital, but also its cost.

2.3 Legal lacuna: lack of registered title to property

We understand from stakeholders that the current distribution of urban property registration⁵ is as follows:

Table 2.3
Registration status of Egyptian urban property

<u>Status</u>	Registered title	Registered deed	<u>Unregistered</u>	<u>Total</u>
Percent of inventory	0%	7%	93%	100%

In most of the world, a precondition to or parallel development with efficient housing finance is registration of title -- in Egypt it is infinitesimal.

2.4 Market evolution of 'Work-around' alternatives to registration

Though the normal methods of owning, securing title to, and mortgage-financing are unavailable to Egyptians, housing finance does not stop -- people have to buy and sell homes, so the marketplace finds ways to accommodate and finance purchases and sales via 'Work-arounds,' which we subdivide into three categories: legal, financial, and behavioral, and summarize in the following table:

-

⁵ This report does not discuss rural properties.

⁶ For a definition, see Exhibit 1, *Definitions*.

Table 2.4
'Work-arounds' in the Egyptian housing marketplace today

<u>Legal Work-arounds</u>	Financial Work-arounds	Behavioral Work-arounds
Registered deeds. Recording of an agreement but not of property title status.	Cash purchases of home resales.	Rent control (and property deterioration). Neighborhood long-term decline and blockages to revitalization.
Installment-sale land contracts. Developer-held loans where property cannot transfer until the last payment is made.	Short-term loans (self-amortizing). Very high debt service constants, substantial capital locked up.	Very long tenancies (and multi- generational ownership). Likely under-utilization and over- consumption.
	Developer purchase-money financing. Developers offer 'interest-free' financing over 3 to 7 years.	Very heavy legal administration. 60% of all cases are real-estate- related.
	Ministry of Housing long-term bargain-rate loans. 30-40 years, 5-6% interest.	No permanent rental stock/ professional landlords. Such small 'new law' stock as is available is handled by individual owners, not professional firms.
		Ministry of Housing direct production. To plug a gap in the housing production marketplace.

2.5 Shortages of financial choices

Today Egyptian housing finance is a marketplace that sells basically only one product: the short-term fixed-rate self-amortizing loan. (Variations of this product are offered by banks, housing finance companies, and developers.) The following financial products are largely or entirely unknown in Egypt: long-term loans, bank or Housing Lender financing for individual resales, purchase-money financing, junior-lien financing, equity takeout refinancing, balloon loans (and bullet loans), lease-purchase, and home improvement loans.

The net result is an unintentional (and largely unperceived) stifling of new financing initiatives, and a very high debt service constant burden for those who *can* tap financing.

2.6 Registration

Lack of registered title continues to inhibit formation of a normal mortgage capital market. Experience in two similar countries -- Indonesia and Thailand -- suggests that registration formalization will take a decade or two and involves a broad-based campaign across several ministries, including:

- · Legal reforms.
- A major public awareness campaign.
- Risk mitigation by government.
- Legal innovation, including lease-purchase, with government administrative and legislative support.
- Significant financial product innovation.

We strongly recommend a bilateral or trilateral peer-to-peer exchange between Egyptian housing finance officials and their appropriate counterparts in Indonesia and Thailand.

2.7 Customer awareness and data

Both lag behind where they should be. Customers tolerate limited mobility and limited choice of properties and products; they endure extensive and extended property disputes arising from suboptimal titling and registration. Market participants lack access to a yield curve, risk curve, property transaction/ pricing histories, credit bureaus, and reliable supply inventory information. All these things take time to develop and are the subject of a massive and broad-based effort.

2.8 Rent control distorting effect

This archaic holdover is distorting or inhibiting markets. It degrades neighborhoods, retards urban revitalization, chokes household mobility, makes quality rental housing scarce, and inhibits household formation.

2.9 Ministry of Housing and New Urban Communities

With ownership over all Egyptian land not otherwise accounted for ("the Ministry of Housing owns the desert"), the Ministry of Housing is the single largest governmental factor influencing the state of Egyptian housing markets and Egyptian housing finance, in several ways:

- Development land. As the monopoly source of development land in Egypt, with the
 resulting inherent power to specify zoning, registration, or other requirements on its
 development, the Ministry of Housing has both an enormous financial asset and the
 ability to use it to design programs that shape the market.
- **New Urban Communities**. Through its New Urban Communities⁷ initiative, the Ministry of Housing allocates large plots of land to developers, at no cost. The GSF is eligible to tap land on this basis as well.
- **Production and financing of low-income ownership housing**. In exchange for its in-kind equity contribution (land value) within the New Urban Communities initiative, the Ministry secures a portion of the resulting ready-to-develop land, on which it constructs new blocks of flats for sale to low-income households. To sell the homes it builds under New Urban Communities, the Ministry of Housing provides its own financing to eligible buyers, which has been reported to us as extremely favorable: 5-6%, forty years, self-amortizing. These terms are unique in the marketplace and represent a 25-48% discount from a 'par' instrument, and the resulting debt service constants are only *one-third to one-fifth* that of market financing.

2.10 Mortgage Finance Authority

A newly created entity established by the Real Estate Finance Law (Law No. 148 of 2001), the Mortgage Finance Authority (MFA) is in its early stages of development and establishment within the financial marketplace. The MFA is moving forward to develop a proper organizational structure and establishment of its role as the principal regulator of the Egyptian housing financial sector -- specially, as supervisor of mortgage lending and mortgage lenders.

⁷ The New Urban Communities Authority Web site, www.nuca.com.eg, is wholly in Arabic. According to a 2001 article posted by the Egyptian State Information Service, about LE 788 million was allocated toward New Urban Communities projects in the 2001/02 plan. http://www.sis.gov.eg/yb2001f/ehtml/ch14.htm#part1.

Mortgage lending supervision and its corollary, mortgage market stimulation and expansion, appears to be emerging as its principal role, quite probably exclusively for the next several years as the MFA establishes itself, proves concept, and grows its income streams toward sustainability.

2.11 Guarantee and Subsidy Fund

The GSF was established in 2004 as a byproduct of legislative initiatives seeking to accelerate activity and innovation in the housing financial market.

Resources and operations today. The GSF today has some considerable resources: legislative mandate, endowment balance sheet, vested income stream (see Article 36 of Law No. 148 in Exhibit 3), capable diversified board, and access to Ministry of Housing land on favorable terms.

All activities the GSF is currently undertaking are within its mandate.

The GSF's activities are not interfering with normal market activities and the development of successful or effective mortgage financial markets.⁸

The GSF's mandate is broad, and it is far from filling its entire mandate. The mandate supports many other activities that the GSF could pursue. Several of these are listed in Section 4, from which we develop a list of recommended top-priority activities to initiate.

Elements required for the GSF to succeed fully. The GSF currently lacks:

- Resolution of its future mission and relation to the Egyptian government (see next point)
- Proven business strategy
- 3. Business strategic plan
- 4. Proof of concept of at least one sustainable and expandable business line
- 5. Financially credible vision of sustainability
- 6. Growth path to sustainability
- 7. Executive staff capable of developing the foregoing, especially the Credit products that can lead the GSF to sustainability.

Given the state of Egyptian housing finance today, the GSF has a unique opportunity both to jump-start the creation of real estate oriented asset-backed securities and to provide incentives that complement other efforts such as improved title registration. These possibilities are explored in the balance of this report.

3 Overall Goals, Strategies and Guiding Principles

All businesses, including public-purpose bodies, are entities created to accomplish certain results. To shape the GSF, therefore, one should begin not with its current organizational configuration, but rather by starting from its mission and migrating to market gaps, effective interventions, and products or services:

⁸ The same cannot be said for the Ministry of Housing's activities, which although well-intentioned, are unfortunately (and doubtless inadvertently) complicating the marketplace and probably inhibiting growth of a normal mortgage market. See Section 5H below.

Mission → Gaps → Effective interventions → Products and services

These, in turn, mandate a certain organizational structure, and a resulting governance and affiliation.

Products and services → Organizational structure → Governance and affiliation

Only after a first-principles assessment of the GSF's desirable roles can one address how it should be configured, and how it should evolve to match that configuration.

3.1 Mission and gaps

Every nation struggles with housing affordability, simply because land value is a residual, so that as a country's aggregate income rises, so does the value of its urban land. Thus, in almost every⁹ developed nation, government plays a role in delivering subsidy products to eligible moderate or low-income households. The imperative is straightforward:

Low income housing → subsidy → government appropriations

Beyond the subsidy mission, Egypt faces a more fundamental challenge -- that of building a modern and efficient system of mortgage finance. For historical and other reasons (set forth in Section 2 and Exhibit 2), Egypt lags in mortgage finance compared to what one would expect in a nation of its size, sophistication, and economy.

Other nations have faced this challenge at some time in their development, and while the earliest mortgage markets formed independently, without government involvement, since the first third of the twentieth century, government has played a significant role in priming the mortgage market by offering programs that credit-enhance particular housing loans, and in so doing shield the private sector from non-commercial risk. The imperative is likewise straightforward:

"Middle-market" formation of mortgage market → guarantees and mortgage support → government balance sheet or sovereign risk abatement

Additionally, credit enhancement products (a) can be self-sustaining after an interval (and can generate positive cash flow from inception, because they charge fees for taking risks), (b) are normally an important precursor to subsidy schemes, and (c) never reach the low-income population in any large volumes unless they are supported by subsidy.

3.2 GSF's unique role and goals

As it is now configured, and even though it is nascent, the GSF has a clearly defined unique *strategic* role in the Egyptian housing financial ecosystem:

It is the *only* entity that has a platform, mandate, and probable resources to be a financial product innovator.¹¹

This is highly significant -- it represents the unique competitive position that should define what the GSF does and what it leaves to others. And it leads to a further concept:

If the GSF is both to innovate and be self-sustaining, it must migrate to market inefficiencies, where real risk is less than perceived risk.

_

⁹ Certainly, all the developed nations with which we are familiar.

¹¹ The Ministry of Housing has the property and governmental resources but not the predisposition or mandate to do so. See Section 5H below.

In Egypt today, perceived risk may be large for several reasons:

- *Market ignorance*. Lack of reliable data on (a) transactions taking place in the market, (b) the inventory of sold-but-unoccupied properties, (c) market gaps (underdeserved constituencies who can afford housing), and (d) the yield/ risk curves.
- Absence of central mandated participant. Some risks can be managed only by a large central player with a mandate and a balance sheet/ risk tolerance to implement the mandate.

When real risk is less than perceived risk, insurance products make a profit because the collectible market premium for the product is greater than the expected market cost of assuming the risk. Moreover, a government-sponsored entity has more ability to absorb risk, and somewhat more ability to mitigate larger ecosystemic risk, than any private sector participant.

The evidence suggests such opportunities are at least available if not plentiful in Egypt today.

3.2.1 Market stimulation and development

This report is being written as an activity under one of the four Tasks that are currently being undertaken by Chemonics as prime contractor on the Egypt Financial Services (EFS) project. One might therefore expect that the GSF's activities should be compatible with -- contribute to and benefit from -- activities undertaken in other parts of the EFS contract.

Indeed, this is readily apparent, since the EFS contract is touching on all of the following:

- Task 1. Creation of a supporting framework for real estate finance.
- Task 2. Improve registration of urban properties in concert with the Ministry of Justice.
- Task 3. Development of a broader market for Egyptian mortgage finance.
- Task 4. Establish a broad credit information system.

The EFS contract thus touches the Ministry of Finance, Ministry of Housing, Ministry of Investment, Ministry of Justice, Capital Markets Authority, Central Bank of Egypt, and Mortgage Finance Authority, as follows:

Table 3.2.1 Governmental bodies touching on the GSF

Capital Markets Authority	Regulates asset-backed securities (ABS). Thus controls securitization
Central Bank of Egypt	Controls money supply, regulates government interest rates.
Mortgage Finance Authority	Current custodian of GSF responsibilities. MFA chair is also GSF chair.
Ministry of Finance	Ultimate responsibility for Egyptian budget expenditures.
Ministry of Housing	Source of New Urban Communities. Source of land for development (GSF entitlement on favorable terms). Source of the current GSF endowment.
Ministry of Investment	Has supervisory responsibility for the GSF.
Ministry of Justice	Controls registration of title/ deeds, foreclosure process. Authority over secured lending.

The Ministries of Finance and Justice have supervisory authority over financial instruments, but are not tasked with innovating them. The GSF is so tasked. In light of the GSF's tasking and the Egypt marketplace's needs today, it seems evident that:

Stimulating middle-market housing financial product innovation is a core function of the GSF.

In light, the GSF should expect to work with other EFS counterparts, and benefit from their advances.

3.2.2 Credit enhancement versus securitization

Although the terms tend to be used interchangeably -- in particular, securitization can be a catch-all -- they are critically different.

- **Credit enhancement** (see *Definitions*) is the process of adding collateral/ guarantees to an existing pool of loans so that those loans can be sold.
- **Securitization** (see *Definitions*) means *creating a new issue* whose major collateral source is the same loan pool.

Credit enhancement does not require securitization. Securitization is not credit enhancement, it is credit *substitution* (the issuer's for the loan originators'). And the business dynamics and incentives are quite different, as summarized in Table 3.2.2:

Table 3.2.2
Credit enhancement versus securitization

Credit enhancement	<u>Securitization</u>
Add credibility to an existing pool of loans	Create a new issue backed by an existing pool
Loan originator (not enhancer) taps capital markets	Issuer (not originator) taps capital markets
Pool of loans is sold 'on its terms'	New issue may have different terms
Recourse runs back to loan originator	Recourse runs to issuer, who in turn must enforce against loan originator
Enhancer earns revenue through fee premiums	Enhancer earns revenue through issuance spread
Governmental function (in Egypt today)	Market function

3.2.3 Middle market formation

Very briefly, the middle market today is in a state of flux as it slowly liberalizes. The government has identified registration of title as a critical project, but has yet to awaken customer demand or to incentivize customer households with tangible short-term financial rewards for achieving registration. Indeed, such customers today can buy and sell homes, and access home financing, through non-registered and unregistered channels, including some government outlets (Ministry of Housing New Urban Communities).

The GSF's work in the middle market segment should, therefore, aim for these goals:

- Move the bankability frontier downwards -- make it economical to originate loans to households whose income is lower than current commercial thresholds dictate.
- Expand the overall supply of and usage of mortgage finance and housing loan products.
- Facilitate and incentivize registration.

- Create product choice for customers.
- Assist or supplement Housing Lender growth (because they are essential to a functioning diversified ecosystem).
- Introduce new products that may initially be the exclusive province of government entities but whose introduction encourages the private sector to innovate in order to complement or compete with them.

3.2.4 Low Income homeownership

Today "low income" is defined in the Real Estate Finance Law (see Exhibit 1) as individuals whose income is below LE 1,000 per month, or families whose income is below LE 1,500 per month.

The task -- serving the Low Income market -- is easier to define (if more expensive to accomplish): bring more Low Income Households into homeownership, and short of direct homeownership, into the financial and banking system. Create upward paths for low-income households to save, access capital, and become homeowners.

3.3 Business strategies

Section 4 will list numerous activities the GSF could undertake and grow into active core business lines. Today the GSF is in only *one* of these business lines (down payment subsidy), and with a low level of activity in that arena. So the GSF is in the fortunate position of having its options wide open, especially as many of the intriguing business lines are wholly unoccupied in the conventional space.

But it must choose wisely -- its first business activities must be those that are its highest priority.

In evaluating which among these potential business activities to pursue, the GSF should assess each one in light of the following principles:

3.3.1 Sustainability

Unlike a Ministry that may count on an annual budget appropriation, the GSF is a parastatal¹² that has been established with a capital endowment but has no expectation, much less any guarantee, of ongoing funding. As its *first* priority, therefore, the GSF must develop a sustainable business model from the endowment resources available to it.

Credit enhancement products can be self-sustaining and generate operational cash flow, whereas subsidy products are inherently unsustainable and thus require a continuous infusion of budget appropriations from government. Subsidy can never be a path to GSF sustainability; credit enhancement can.

With respect to sustainability, the GSF must consider credit and subsidy activities separately:

- **Credit division activities** -- credit enhancement, bond issuance, securitization, all the financial instrument creation business lines -- offer the prospect of sustainability (even cash flow) in the short term.
- **Subsidy division activities** -- regardless of configuration -- drain cash resources. (The rate of drain varies by activity.) None of them are or can be self-sustainable.

¹² A semi-autonomous, quasi-governmental, state-owned enterprise.

3.3.2 Public-policy mission: who is served?

What socioeconomic group of Egyptian households should the GSF target? Should it be:

- Low-income (currently defined as monthly income of LE 1,000 for an individual, LE 1,500 for a family);
- Middle-market (broadly defined as median income or below); or
- **Some combination** of the two, and if so, in what proportions?

The GSF's enabling legislation (see Article 35 of Law No. 148/2001 in Exhibit 3) highlights that low-income households are to be served, stating that:

A Fund shall be established to guarantee and subsidize the real estate finance activity. It shall have the public corporeal personality and shall be attached to the minister concerned. The fund shall subsidize the real estate finance activity in the field of selling the dwellings to low-income brackets through the Fund's assumption of part of the installment amount in a way lowering the finance burden to limits commensurable with their incomes, providing it does not exceed one fourth of the income.

At the same time, the enumeration of interventions listed above demonstrates three key findings relevant to the GSF's choice of target population as it relates to middle-income Egyptians:

- Need. Middle-income Egyptians have a very broad need for financial products such
 as could be provided by the GSF's Credit Division. They are valuable, absent from
 the marketplace, and likely to arise only if the GSF uses its government mandate to
 stimulate their creation.
- **Sustainability**. GSF business lines targeted at middle-income Egyptians can be self-sustaining in short order -- indeed, with good management and good fortune, we believe they will be profitable. Activities targeted at low-income households must necessarily drain cash and will never be self-sustaining.
- Enabling environment. GSF Credit division products originated for use with middle-income households will also benefit low-income households. The reverse is not true. Going further, middle-income initiatives will actually lower the per-home cost of providing assistance to low-income households. Again, the reverse is not true.

Beyond the strategic question, there is a further legal issue. The GSF will need to be satisfied that its proposed business plan complies with its enabling legislation. Perhaps this matter should be the subject of a legal opinion provided by counsel to the GSF, but if not, a government affirmation -- such as a Presidential decree – might be required to remove any doubt. Whether such legal comfort is required and the form it should take, is beyond the scope of this report.

3.3.3 Achievability and capacity growth

Businesses can succeed -- and sustain themselves -- only by doing things they know how to do. Indeed, in a competitive environment, they must do some things as well as or better than any other current participant and likely future entrant. So whatever the GSF takes on, it must accomplish.

This condition is more important for the GSF as it stands today, for two reasons:

¹³ Proper structuring and market pricing are, of course, essential. Development of internal working groups that interface with external focus/ stakeholder groups is critical.

- **No proven capacity today**. Meaning no disrespect to the fine individuals working at the GSF, the entity itself does not have any proven core capacities consistent with the business activities listed above. It must develop some.
- **High cost of early failure**. Private startups can afford few early mistakes. Public-purpose entities such as the GSF can afford even fewer. The political spotlight already shines on the GSF; it can neither fail nor wobble.

Some proposed GSF activities are harder -- more complex, more risky -- than others. Some require or benefit from previously established capacities that could be grown as a byproduct of other business lines. Choosing a suitable degree-of-difficulty sequence of activities is essential.

3.3.4 Fund or business?

Although the GSF is entitled a "Fund," nothing in its articles of organization appears to preclude its acting in ways that more resemble an equity investor, passive or non-controlling partner, or even business operator. Moreover, the GSF owns properties today and has the legal right to acquire (from the Ministry of Housing) land tracts for co-development. Being an owner rather than a lender is possible. So is being a partner in a public-private venture rather than simply a financier.

At the same time, such activities are necessarily higher complexity and degree of difficulty than the first-order Credit or Subsidy products. It thus seems unlikely that they would be among the *first* activities the GSF would undertake.

For example, knowing the GSF might wish to become a co-developer, a viable complement to the Ministry of Housing New Urban Communities development system, would influence what types of resources and capacities the GSF would seek to build. It is worth having the Board debate and come to a consensus on the extent to which it wishes to enable or incubate such possibilities, or to foreclose them -- especially because, as the GSF becomes active, we can expect that parties will seek it out with business proposals. It is well to be ready for them when they surface, because otherwise policy is made ad hoc or, worse, there is no policy at all.

3.3.5 Using endowment's non-cash assets

The GSF's endowment consists of assets in three categories, as follows:

Table 3.3.5
GSF Endowment (simplified) by asset class

<u>Type</u>	Face amount (LE mn)	<u>Discussion</u>
Cash	49	Required to fund staff salaries, office overhead.
		Also being used for the down payment subsidy.
Properties	22	Completed flats and commercial properties. Estimated to be 1,200. Some are being sold using subsidy as a gap-filling resource.
Receivables	223	Apparently, land contract sale notes on both residential and commercial properties originated developed by the Ministry of Housing. Cash flow status unknown. Collectibility unproven. Not financeable absent credit enhancement.

¹⁴ We have heard verbal reports of at least two foreign groups making such overtures already. A US group offered to set up a securitization capacity (presumably in exchange for being its underwriter/bond banker), and a Malaysian group is interested in levering the free-land opportunity into new housing development.

Guarantee and Subsidy Fund (GSF): Goals, Options, and Recommendations Technical Report No. 20 Even though the GSF has a notional net worth of over LE 345 million, liquidity is a considerable challenge, not just in the long-term, but immediately.

The GSF's liquid net worth is LE 50 million (and falling). With down payment subsidy at LE 10,000 apiece, a total of 5,000 homes could exhaust GSF cash resources (even assuming the remaining organization generates no net cost!), a figure that could be reached in a year if the subsidy business picks up.

Meanwhile, the non-cash assets are unproven and have no ready means of liquidation. While the properties may be realizable for cash (at some discount), the collectibility and value of the receivables is unknown, unproven, and dubious.

What should the GSF do with its non-cash assets?

- Should it simply try to reduce them to cash as part of balance sheet rationalization?
 (If so, at what discounts?)
- Should it use them as enticement to facilitate subsidy outflow?¹⁵
- Should it hold them for the long term?

This is a core business strategy issue that should be decided by the GSF's board.

3.3.6 Relationships with other stakeholders, attracting partners

In broad terms, stakeholders such as developers, Housing Lenders, and housing professionals could be considered partners, but in their *business* relationships with the GSF, they will be client, borrowers, buyers, and so on. They will partner with the GSF only when it is in their *business* interest to do so -- when they see that business relationship as bringing them better value than doing some other activity.

The GSF must always be mindful that its status as a favored government entity is no guarantee of attracting business partners (indeed, in many parts of the world the private sector has a jaundiced view of partnering with government). It must therefore adopt a set of business postures and roles that:

- Are clearly defined.
- State affirmatively the competitive advantages and strategic assets the GSF is prepared to deploy.
- Define a range of permissible business relationships the GSF will consider.
- Have the effect of inducing the best market participants to consider working with the GSF.

The GSF's choices of early activities should further this market image and market visibility.

3.3.7 Revisiting the 25% payment-to-income ceiling

The Mortgage Law provides generally that the GSF (and similar entities) may not originate loans whose payment requirement is greater than 25% of the (reported) income of the buying household. This ceiling, though clearly well-intentioned, is low by all standards relevant to the GSF:

- Conventional Egyptian housing. Available evidence suggests that in the conventional marketplace, customers pay higher percentages of income for rent.
- **Norms in other nations.** In other countries, ¹⁶ both developed and developing, payment-to-income ratios of 30% and even 35% are considered affordable.

¹⁵ In effect, that appears to be the use to which they are currently being put.

• *Impact on the GSF*. A 25% ceiling significantly restricts both the GSF's activities and the amount of housing that buyer customers can acquire. Raising the percentage could boost customer home-buying power 20-40%¹⁷ even before considering benefits of (say) Credit Division products that reduce the interest rate and debt service constant.

The ceiling is statutory, so its change is parliamentary. That will take time, and advocacy may come best from the Ministry of Housing or the Ministry of Investment. Still, if the GSF believes the ceiling restrictive, it ought to establish position papers to that effect, and raise the issue in ministerial and parliamentary discussion.

3.3.8 Relationship with the Ministry of Housing

As noted above, the Ministry of Housing is the dominant actor in Egyptian affordable housing:

- It is the source of all public land, including favorable-price land that could be deeded over to the GSF.
- Through its New Urban Communities housing program, it creates 70,000 or more homes a year, with very favorable purchase prices and financing terms. This is a significant market impact.

Even though the Ministry of Housing is a fellow government agency, and therefore committed to the same public-policy goals, in practical business terms -- from the perspective of customer households and potential financial partners -- it acts as a competitor, offering products and services that the GSF could offer.

Indeed, the Ministry of Housing's financing tools (30-40 years, self-amortizing, 5-6% interest rates) are so far out of the marketplace that they must distort the normal marketplace, and inhibit the formation of a healthy mortgage finance market.

And the Ministry of Housing is larger, better established, connected directly to the budget appropriations, and politically senior to the GSF (and to the MFA). The GSF thus needs to establish a business activity model that *is* compatible with the Ministry of Housing's business lines and the Ministry of Housing should *recognize this compatibility*.

How to do that is far beyond the scope of this report. It lies within the purview of the GSF's board and, ultimately, with the Ministry of Investment, Ministry of Housing, and Prime Minister.

3.3.9 Subsidy activity, and the possibility of transfer to the Ministry of Housing

As discussed above under *Sustainability* (Section 3.3.1), the GSF must consider its Credit and Subsidy activities separately. Indeed:

To the extent GSF concludes it is a Subsidy delivery entity, then it must arrange a government budgetary funding stream, else it will exhaust its endowment and have to cease operations.

¹⁶The US uses 30% of income. The UK uses 35% (of after-tax income). Both countries include utilities in the affordability calculation.

¹⁷ At 25% of income for debt service, a low-income household (earning LE 1,500 per month) can afford LE 25,000 of home (14% interest rate, 7-year self-amortizing) in the open marketplace. At 30%, LE 30,000; at 35%, LE 35,000. However, down payment equity may -- probably does -- also serve as a secondary constraint.

If the GOE and the GSF adopt the posture recommended in this report, the GSF will be devoting its principal energies to Credit products, leaving Subsidy activity to come later. Under those circumstances, one could consider devolving the Subsidy activity out of the GSF, perhaps back to the Ministry of Housing. As noted in the preceding section, the Ministry of Housing already develops property, sells homes at lower cost than market, and provides internal financing subsidy via below-market loans. Adding down-payment Subsidy to that array would be entirely logical and compatible with current Ministry of Housing activities.

At the same time, the Egyptian housing financial marketplace will work better if Ministry of Housing activities are brought into the larger marketplace rather than having the Ministry of Housing act as its own self-contained entity that benefits only its customers and has little interaction with other entities or the real estate markets generally. Integrating Subsidy activities in the broader marketplace is better if it is achievable, while returning them to the Ministry of Housing would be more logical if the effort to add Subsidy to the GSF mix would be counterproductive.

Where to house Subsidy activity, like the question of how much annual appropriated budget authority to provide, is ultimately a policy and political question for the GOE to decide.

4 A Menu of Options: Possible GSF Products and Services

In developed nations, the housing finance ecosystem has a heavy government presence across enabling legislation, appropriated resources, tax incentives, financial products, services, active entities, and so on. Indeed, so significant is the government's presence in these countries that it is the core terrain feature that supports many species of actors and whole business and market niches. In completely undeveloped countries, by contrast, the housing finance ecosystem has little or no government presence.¹⁸

Egypt's housing financial ecosystem¹⁹ is closer to the undeveloped than fully-developed arena; in ecosystemic terms, there are many empty spaces. At one level this represents a challenge, but at another, it means that the GSF has enormous freedom of action. Virtually every initiative it might logically consider is currently unoccupied, with no direct competitors and at best unwilling participants who are providing a housing financial solution (e.g. installment-sale land contracts) as a stepping stone to some larger, more important objective (e.g. selling houses).

The basic premise here is simple: customer awareness, business activity, and improved administration all flow when customers *can see some successful case study examples that demonstrate it is worth doing.* As the market for housing finance is currently blocked and inefficient (see Exhibit 2), the GSF can change the market dynamics by introducing new Credit Division products that remove non-commercial risk.

The GSF could do many things. But it must choose carefully which to undertake; trying to do too many or too diverse a set of initiatives merely invites failing at all of them.

However, while we may make recommendations, ultimately the GSF's decisions belong to it and are inherently governmental. So for the GSF and its governmental partners to make the best choices, they should have an informed view of the full range of possibilities, not just the ones the advisor thinks most promising.

To give the decision-makers a proper briefing, therefore, we examine each of the possible activities in a structured and consistent way, noting strengths and weaknesses, features and risks. In Exhibit 3 we present an expanded taxonomic evaluation of several of the most promising initiatives, with particular emphasis on distinct families of interventions.

Here we provide conceptual sketches as a means of acquainting readers with the broad range of activities that are (1) within the GSF's mandate (liberally interpreted), (2) beneficial to the Egyptian housing financial ecosystem generally or to low-income households specifically, (3) unique possibilities because no one is currently providing them in the marketplace, and (4) at least facially promising for the GSF in either an economic or policy sense, if not both.

4.1 Category 1: Stimulating the market

Borrowers are capital *consumers*-- they have assets but they need money now, so they 'rent' money from large capital sources. Ultimate debt investors (such as bondholders) are capital

¹⁸ These two endpoints are not meant to imply that more government involvement is intrinsically better -- it's not -- or that any *incremental* government intervention is helpful -- frequently it is not. Rather, we are observing that *some* government is an essential precondition to the growth of a complex interdependent financial ecosystem that brings more customers, especially low-income ones, into the housing marketplace.

¹⁹ Developing a more rigorously described acceptatem and population it bethe vite as a financial control of the state of the state

¹⁹ Developing a more rigorously described ecosystem and populating it both with conceptual objects and estimated market volumes would be useful, and is proposed among the follow-on initiatives given in Exhibit 5.

deployers -- they have cash and they want to earn a return on it over a stipulated period of time. For borrowers and ultimate debt investors to find one another is inefficient, so instead in a normal marketplace they are connected via two other entities:

- Mortgage originators, who make new loans one by one.
- Principal dealers, or securities brokers, who sell structured investments to the public.

The resulting transaction is shown in simplified form in Figure 4.1:

Figure 4.1
Normal mortgage resales ("secondary market" model)

Pure Market Model GSF 3 Sells loans/financing debts Housing Principal Lenders **Dealers** Pays cash to buy loans 5 Subscribes to Makes loans/ Pays monthly Receives bond financing debt installment or purchases payments debt securities House Investors **Owners**

In a normal developed mortgage marketplace, the GSF has no role because it is not needed.

Housing Lenders originate loans (Step 1) and receive in exchange a stream of debt service payments (Step 2). From time to time they then sell these loans (Step 3), either individually or more commonly in large bundles, to investors (e.g. banks, pension funds, insurance companies, and similar large-scale capital aggregators) whom they identify through normal capital markets (e.g. banks, bond brokerage houses, securities dealers and otherwise). They use the capital they receive (Step 4) to replenish their liquidity and originate new loans (expanding the volume of Step 1 activity).

In Egypt today, this market does not exist for Housing Lenders: they cannot sell their loans into the capital markets, nor can they package them into bundles or sell bonds, mainly because the loans are not seen as secure enough to attract investor interest. As a result, Housing Lenders will rapidly deploy all their capital and have no means of expanding their business. Finding ways to enable these loans to be sold will liberate very substantial capital for the Housing Lenders, and hence substantially stimulate the market.

4.1.1 Credit-enhance the existing pools of Housing Finance Company loans

Housing finance companies (HFCs), of whom Egypt has only two, are a leading-edge mover into the housing finance marketplace. Because HFCs have proven effective in expanding the marketplace in other emerging countries, these two entities have been able to secure government or multilateral investment funding. But their capacity to grow is limited by several factors, including their inability (at present) to deploy their capital after they have made a loan.

Normally loan originators like HFCs can assemble portfolios of performing loans into packages that they then sell (in a secondary mortgage market) to other investors. This can be accomplished in several ways:

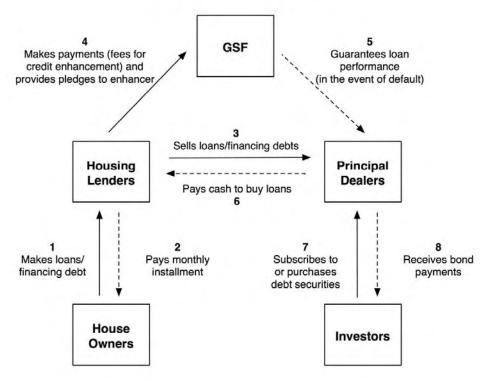
- Direct loan sales. Sales of the loans directly, where the buying entity simply takes
 over the loans.
- Credit enhancement sales. Sales of loans that have received some form of credit
 enhancement, where a third party (a large financial institution, a governmental entity,
 or otherwise) provides a guarantee or additional collateral so that the package of
 loans can then be sold.
- Securitization. Sales of new securities issued by the lenders themselves, which in turn are backed by a pledge of the cash flows from the mortgages. Such an approach (called generally 'securitization') in effect substitutes the *lender's* credit as an entity for that of its loans.

Inability of the HFCs to clear their loans from their books by direct sales, credit enhancedsales, or securitization, is partly a question of scale and much more likely a question of imperfect security/ credit.

The GSF can render these HFC loan books instantly marketable by offering credit enhancement products -- such as payment insurance or mortgage insurance. The transaction would look something like that depicted in Figure 4.1.1:

Figure 4.1.1
Credit enhancement model

Credit Enhancement Model



Under a credit enhancement approach, the GSF would undertake to provide payment assurance to buyers of Housing Lender loans or securities. After originating a pool of loans just as before (Steps 1 and 2), the Housing Lenders would sell their loans or bonds to the capital markets (Step 3) but to do that, they would first negotiate a credit enhancement commitment with the GSF, whereby they would pay fees (Step 4) and the GSF would provide guarantees (Step 5) so that capital markets investors would underwrite their bonds (Step 6); the markets would then sell individual bonds or bond issues to investors (whether individual or corporate, Steps 7 and 8).

In this model, the Housing Lenders are the issuers, with the GSF playing a support role of being an insurer and being paid insurance-type fees for doing so.

Such a credit-enhanced loan pool would be rapidly absorbed in the Egyptian marketplace by banks who are seeking reliable returns. The credit enhancement model thus does not require the GSF to originate its own debt at all, much less to securitize. It would simply provide a form of credit enhancement, on a suitably risk-shared basis, with the originating HFCs.

This is an obvious and valuable first-order intervention that would immediately give a significant boost to these two HFCs. We believe it would be quite attractive to them.²⁰

The challenges would be pricing it judiciously (enough to hedge the risk but not so much as to consume the entire yield spread) *and* structuring the risk-sharing commitments to be obtained from the participating HFCs. Both such exercises are technical and challenging. Both are quite feasible.

²⁰ Although we interviewed one of the two HFCs, we declined to suggest this specifically, as being beyond our authority to raise. However, the HFC in question observed it had no way to clear loans off its balance sheet and that this was a constraint on its ability to grow its business. We thus believe a clearing capacity would be most welcome, if properly priced.

4.1.2 Create a pooled security to liquefy land-contract receivables

Land developers are unwilling financiers because there is no other means for them to sell their newly built flats except to extend credit to their buyers. They do this at an implicit interest cost that approximates commercial lending rates, even though their internal cost of capital is likely very much higher, and even though they lack mortgage security. Despite the apparently 'weak' security (the installment land contract), we understand default rates are low, so a financing of these receivables ought to be economically sensible, especially if the real and perceived default risk were reduced through a combination of external and internal credit enhancement.

Analogizing from the extraordinarily successful introduction of a stock market Settlement Guaranty Fund, we imagine the GSF forming an invitation-only, member-based syndicate (the "Loan Pool") where selected developers would have the following multi-part transaction:

- 1. The developer would contribute its land-contract receivables ("Receivables Book"), at a valuation ("Contribution Value") derived from an agreed standard methodology.²¹
- The developer would deposit with the Pool a stipulated Default Collateral (presumably a percentage of its Contribution Value), in cash, to be invested as part of an overall Default Reserve.
- 3. The GSF would contribute a stipulated amount of equity ("Pool Equity") equal to a stipulated percentage of the aggregate Contribution Value.
- 4. The developer would commit to replenish any draws against its Default Collateral that may be required to cover losses from its Receivables Book.
- 5. The Loan Pool would issue securities ("Pool Securities") whose principal amount matches the total Contribution Value from all participants and which are secured by the entire aggregate Loan Pool assets.
- 6. Each contributing developer would receive Pool Securities whose face amount equaled its Contribution Value.
- 7. The Loan Pool would also arrange a purchase facility (e.g. a consortium of Egyptian financial institutions) prepared to buy the Pool Securities, at issuance, at face value (no premium, no discount).

This *is* a securitization, but on a closed-end basis, as the GSF would sell its loan securities, probably in bulk to financial institutions.

The key here, as with the Settlement Guaranty Fund, is that the contributing developers are held individually and collectively accountable through the calibratable device of the Default Collateral contribution. The replenishment feature becomes meaningful if, as we believe likely, developers who wish to participate can anticipate doing further business with Ministry of Housing.

The structural appeal of this activity is simply that it can be tested via a pre-offering unofficial circular (called a 'red herring' in US securities parlance) to large developers; then, if enough developers express interest, a formal offering prospectus is issued and the transaction moves forward. Further, it uses the GSF's government platform as a mixture of fair referee (valuation) and credit enhancement to the marketplace. Finally, the GSF can make fees as fund manager and issuer, such fees to be influenced by the rate spread between the implied discount rates on land contracts now (12.5%) and the required rate to sell the Pool Securities (e.g. 11%?).

²¹ For instance, a discounted present value based on the expected payment stream, assuming a standard default rate or default formula based on each installment, months in the future, or outstanding balance. Some technical work would be required here.

4.1.3 Establish a property loan Liquidity Fund

Have the GSF issue bonds (new securities) backed by pools of performing mortgage loans. This is securitization -- issuance of new securities whose principal collateral is not so much the issuer as the pool of underlying assets. Such a 'liquidity fund' was referenced by several stakeholders as a takeout facility that would issue securities backed by bundles of performing loans bought from primary originators. Indeed, recently the World Bank has proposed, at least in concept, assisting the GOE to establish a liquidity fund by supplying World Bank loans and a line of credit of at least LE 90 million.

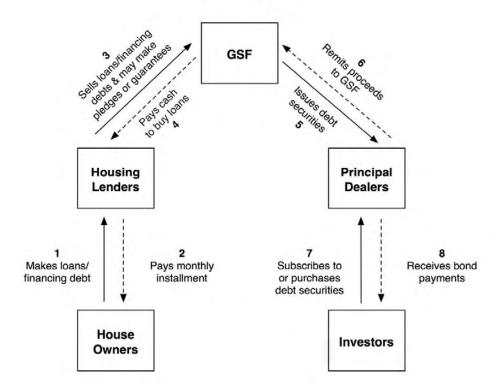
The challenges are:

- How to assemble a large enough book of loans.
- Whether the liquidity fund will include unregistered properties.
- Whether substituting the GSF (or similar entity) as the issuer is both valuable for stakeholder and safe for the GSF.

A figure will make this clear:

Figure 4.1.3 Securitization model

Securitization Model



The securitization approach is in some ways similar to the credit enhancement approach, *but* the economic relationship between the GSF and the Housing Lender is quite different. Once again, the Housing Lender originates a pool of loans just as before (Steps 1 and 2), and the capital markets buy bonds (Steps 5 and 6) which they in turn resell to investors (Steps 7 and 8). But *whose* bonds? In a securitization model, the *GSF* is issuing the bonds, so the capital markets look exclusively to the GSF's credit (even if there is underlying collateral such as a pledge of all the Housing Lender loans). The GSF buys loans directly (Step 3) and must look to the Housing Lenders for loan collection (Step 4), but the Housing Lenders are one crucial step removed from the interaction with the capital markets.

In this model, the GSF plays the more visible role and fuses credit enhancement with issuance.

Securitization can thus be seen as the fusion of two elements:

- Credit enhancement of an underlying pool (either directly by providing a guarantee to the lenders, or indirectly by issuing securities iu the
- Capital substitution by raising money from the capital markets and using that to buy performing loans.

In the loan model, the HFCs raise the capital themselves, with the GSF providing the credit enhancement. In a securitization model, the GSF does both. As compared with 4.1.1 (housing finance company pools) or 4.1.2 (installment land contract pools), the difference is that the GSF itself would be borrowing funds from the capital markets and thus undertaking responsibility for collecting on the loan pools sold to it by its participant HFCs.

It is very important that the GSF not allow the apparent simplicity of securitization to obscure the essential dynamics of credit enhancement. Both 4.1.1 and 4.1.2 place the credit enhancement pricing/ negotiation front and center, and if they are properly addressed, then the question of who taps the capital markets becomes less important, as either the originators or the enhancer could do so. Additionally, using either HFC loans or land developer loans as the first pools allows the GSF to return default risk back to those entities. If those two pools are successfully received in the marketplace and then perform after issuance, it will provide an excellent platform for the logical next step of securitization.

4.1.4 Insure loans over unregistered property with performance covenants

Jump-start the business of housing loans, and provide financial incentives to register property title, by offering credit enhancement for a proprietary long-term loan product that has both economic features and performance covenants:

Table 4.1.4
Unregistered loan credit enhancement program

Economic features	Performance covenants
Term of (say) twenty years, self-amortizing.	
Loan amount includes (a) purchase price, plus (b) allowance for registration costs (held back and disbursed upon completion)	Borrower commits to begin registration process, and to pursue it timely.
GSF Credit enhancement (in exchange for insurance premium)	Insurance premium is Level 1 until property registered, then drops to Level 2 after registration. Goal is a significant financial advantage for registration (logical since default risk/ collection loss are much lower).
Issued over <i>unregistered loans</i> on property meeting stipulated size/ price/ location/ zoning criteria ("good real estate").	If property is <i>not</i> registered within stipulated interval (e.g. 18 months), then loan accelerates (at borrower level) and GSF may compel originating lender to buy it at par.
Interest rate set by market forces (but with credit enhancement, closer to sovereign rate)	Mandatory capital deposit by originating lender (similar to mechanisms outlined in 4.1.2 above).

4.1.4.1 Business imperatives

Obviously the foregoing structural description needs work, as well as product testing. But its main ideas are clear enough:

- Virtually none of the inventory today is registered, and customers have little awareness of registration's benefits.
- This program will offer them a uniquely favorable loan product (longer term plus lower rate equals much lower constant equals more house affordable) provided they move to register.
- The inducement to register is time-limited, so the borrower should have a sense of urgency, *but* the reward (financing) is front-ended²² ahead of the task (registration).
- The Housing Lender is likewise motivated to assure registration completes.

This loan program should induce Housing Lenders to create a second service, registration facilitation, for their customers. (Indeed, one can imagine the Housing Lenders

²² A variation would have the loan fund in two tranches, a purchase-based tranche (high down payment) at acquisition without registration, and a second tranche (down payment reduction/ recovery) at registration completion.

making registration counseling/ facilitation mandatory.) Indeed, this inducement of another specialized function is an ancillary (cost-free) benefit.

4.1.4.2 Alternative approach: new forms of ownership entry path

The preceding discussion has focused on financing ownership while presuming that 'ownership' means the traditional form -- legal and economic control from inception. Another approach would be to retreat from immediate 'ownership' and instead construct a different form of tenure that could *lead* to ownership. The idea is that there are two phases of ownership, a full ownership phase (to be attained) and a pre-ownership phase roughly as follows:

- Phase 1: Pre-ownership. Householder (i) occupies the property, (ii) has a secure tenure via a legally enforceable instrument, (iii) is making payments on a mutually reliable basis (householder and owner each have certainty about payment amounts and timing), (iv) has a controllable path to full ownership (predicated on future actions/ milestones as stipulated in an instrument), and (v) has a reasonable practical expectation of moving to full ownership in the near future (say, any time within four years).
- Phase 2: Full ownership. Household owns the property, via registered title, with mortgage financing, on a fully commercial (market) basis.

(Indeed, some might say that the typical installment-sale land contract now used among conventional sellers and buyers is similar to a pre-ownership stage in that the householder is not certain of being able to prevent repossession until the last payment is made.)

The pre-ownership phase *need not be formal legal ownership*. Indeed, throughout the world other strategies are used, including:

- Rent-to-own. Resident rents for some interval of time, normally making matching deposit payments to build up a down payment aiming at a purchase on some future date. The rental may be independent of the ownership purchase option.
- Lease-purchase. Resident signs a multi-year lease where every payment combines

 (a) a stipulated rent, with (b) a built-in additional payment equivalent to debt service amortization as if there had been a purchase. The distinction here is that the financial flows are just like homeownership but title resides in the lessor.
- Installment contract. Similar concept to lease-purchase, but strengthened with a down payment and stipulated installment payments over and above the mortgage financial piece.

All of these are *synthetic financial-ownership forms* that bridge across gaps in registration or mortgage finance.

Typically, these hybrids are introduced by government, which has both the mandate and the financial risk-reward profile to undertake such a mission.

Among the nations using installment contracts is Thailand, which coupled it with a decadelong drive to formalize title registration, financing the installment contracts via a government entity (Government Housing Bank, GHB, www.ghb.co.th).

4.1.5 Create a Housing Lender-funded default risk revolver

This is a mild and less risky version of 4.1.1 or 4.1.2. The idea is simple: establish a collateral pool of a size large enough so that it could write mortgage payment insurance for participating Housing Lenders. In essence, this would be a mutual insurance company writing a single specialized line of credit enhancement. Indeed, if the entity were established

as a *company* controlled by the GSF, shares in it could be sold back to participating Housing Lenders.

From innovations designed to accelerate movement of capital, we now introduce two innovations designed to change the market more directly.

4.1.6 Create a variable-accrual, capped-payment loan

Introduce a new loan product into the marketplace with these features:

- Interest rate resets annually.²³ (As a result, opening interest rate²⁴ is lower.)
- Debt service constant is capped at a figure ("Initial DS Cap") based on initial debt service (say no more than 110% of initial debt service).
- Interest above the Initial DS Cap is (a) not paid by the borrower, instead it is paid by the GSF as Interest Capper, and (b) accrued ("Deferred Interest") as a junior lien to be due and payable on refinancing or sale.
- The GSF as Interest Capper is paid an annual fee ("Cap Premium") built into the original debt service constant.
- The loan may be prepaid by the borrower at any time, provided that any Deferred Interest is fully repaid along with the underlying loan.

This product innovation would immediately stimulate the middle market as it would introduce variable interest rates in a way that protects customers (households) from runaway interest rates. Moreover, the GSF as a governmental instrument is uniquely placed to absorb the risk of runaway interest rates, which will arise (generally) as a consequence of undisciplined governmental actions. In other words, the entity most appropriate to take interest rate risk is an affiliate of the sovereign that has the greatest influence over interest rates.

4.1.7 Take equity stakes in startups

A nation of 73 million people, most of whom occupy flats in cities that are themselves continuing to grow, should have a richly diverse population of housing lenders, appraisers, closing escrow agents/ title insurers, professional real estate agents, and professional rental managers. Today such groups are significantly under-represented. Partly this is due to the unfavorable legal and structural climate -- and the EFS project is quite rightly tackling many areas with worthy and useful initiatives.

But laws, regulations, and programs, even if enacted or established, are themselves activated -- converted from theory into business practice, and thence into customer awareness and demand -- by *businesses*, entities that make an economic living by transacting using the new tools. It is therefore desirable for the ecosystem to have more of such entities, both corporately and in terms of trained individuals.

Where will they come from? In some cases, through repatriation of Egyptians who have learned real estate and project finance abroad and come home to Egypt to start new businesses. In some cases, through new home-grown talent educated at Egyptian

²³ It is not yet clearly established whether variable interest rates are permissible under Egyptian law. If they cannot be achieved directly, they could be simulated by introducing (for example) a short-term loan that ballooned, with a built-in renewal option, exercisable by the borrower, to extend the loan at a new fixed rate set by a formula to an index. (Of course, this simulation so perfectly mirrors variable interest that it too might be challenged on substance-over-form grounds.) For this activity, we presume that one way or another, variable-rate loans are ruled legal and found enforceable.
²⁴ We lack useful statistics on historical fluctuations in Egyptian interest rates and the yield/ risk curves. Development of a historical inventory with some real-time updating capability is among the activities listed in Exhibit 5 as a useful follow-on.

universities. Either way, these new entrepreneurs will also need capital to start the new businesses and to cover the startup deficits such businesses run.

The importance of patient social equity capital has long been recognized by the bilateral and multilateral donor agencies. Entities such as IFC (World Bank), DES (Germany's KfW), DFID (United Kingdom), and FMO (Netherlands) make a practice of investing minority equity stakes in promising aspirants in critical sectors. They match this with domestic social equity capital, whose presence indicates that knowledgeable local entities concur the sector is important and the company promising, *and* that these groups will be 'angel investors' seeking not only to invest in the company, but also to grow it toward a profitable and publicly useful mission. Indeed, that investment pattern is directly visible in the creation of EHFC.²⁵

Over the next 5-10 years, there will be a continuing need for such social capital. It should be sited in a particular investment-oriented arm of the Egyptian government. That should not be a ministry directly, but rather a government entity that is also a nexus of expertise to add value after the investment.

It should not be the MFA -- which is a regulator with a debt orientation.

The GSF is the most logical candidate, although this raises some business issues (chiefly conflict of interest, being part owner of some entities that use/ consume GSF products while not owning others).

At the same time, social equity must be *patient capital*. So while there are significant benefits of this investment activity, it also will consume funds and thus must be seen as a medium-long term strategy rather than a primary focus. Conversely, should an external source (Ministry of Investment?) deem this a national priority -- which we think it is -- then an annual budget line item could be provided that was specifically earmarked for equity investment.

4.2 Category 2: Moving low-income households into homeownership

The Category 1 activities *broaden the overall housing financial market*, benefiting both low-and middle-market households, but more of the middle market.

Additionally, Category 1 activities will create products, services, and companies that can reach down into the low-income marketplace provided they address the economic challenge of moving down-market by appropriately incentivizing them to adjust for the less favorable economics. (See accompanying box.)

All the activities in this section are targeted *exclusively to Low-Income Households*. As currently defined (LE 1,000 for an individual, LE 1,500 for a family), these caps place lending to Low-Income Households out of reach for Housing Lenders. With current market financing at 14%, 7-year self-amortizing, this is a mortgage of only LE 24,000, or 32% of the LE 75,000 flat which is the lower limit of what a market Housing Lender can profitably originate. (With 20% down payment, the total is 40% of the LE 75,000 minimum viable price.) In other words, Low-Income Households can afford less than half of the minimum profitable property (LE 75,000).

Credit Division activity can help close this gap. If, for instance, credit enhancement would allow Housing Lenders to offer financing at 10% (100 basis points over the sovereign rate) with 20-year amortization, this would drop the debt service constant from 22.5% to 11.6%. That would increase the supportable loan from LE 24,000 to LE 39,000, and with down payment, the price up to LE 49,000, or 65% of the minimum price.

2

²⁵ Egyptian American Bank owns 40%, Bank of Alexandria 10%, IFS 20%, DEG 20%, and HDFC (an Indian analog to EHFC) 10%.

In other words, even if the GSF delivers only Credit Division products, these will be a significant benefit to Low-Income Households. This conclusion is significant in light of the GSF's mandate to serve Low-Income Households (see Exhibit 3, *Enabling Legislation*).

The economic challenge of moving down-market: The unhappy economics of profitable transacting

Absent a market counterbalance, per-transaction profitability potential for low-income customers is always lower than for market customers.

Skills are portable up and down-market. In terms of their economic desires and behaviors, low-income customers are no different from middle or upper-income -- they just have less money. As a result, the origination, underwriting, and loan servicing functions applicable to middle-market customers are equally applicable to low-income households -- with little or no adjustment required.

Profit potential per customer. The poor are different in one critical way -- they have less money. Having less money, they can afford less expensive housing. This means that the properties they buy, and the loans they seek, are smaller per household than those of their middle-market contemporaries. Most real-estate-finance activities are compensated based on the money size -- brokers, loan originators, lenders all are paid fees that are calculated as a percentage of the loan amount But while the income from an activity varies with property size, the cost to do it is roughly the same regardless of scale. As a result, for any given real estate activity, it is much more profitable to serve a *higher*-income household than a *low*-income one.

Credit profile weaker for low-income customers. Finally, low-income households may have less-regular (or less formal) income, they may be paying a higher percentage of it for housing, and they have a smaller accumulated asset base (reflected in down payment and additional reserves that could be tapped). Thus, in normal credit-scoring protocols, low-income households will score worse²⁶ than higher-income ones.

The result is that, for any given skill set or activity associated with normal mortgage finance, companies and providers move *up*-market eagerly and *down-market* reluctantly. They go down-market only under three circumstances:

- Down-market origins. Just as real estate ownership has always been an entrepreneurial path to wealth, so has it been a path for smaller organizations to grow large. Many housing specialist businesses began in the lower-income market segments.
- *Upper-market overcrowded.* As all businesses will tend to compete for the high-end, some will be crowded out, and move down-market in consequence.
- Incentivized through targeted programs. Government can lure firms down-market (or keep them there) by making the business-transaction economics of low-income housing as attractive as up-market.

There is also reason to consider an expanded mandate by allowing the GSF to serve both Low-Income and Moderate-Income Households (as defined):

Guarantee and Subsidy Fund (GSF): Goals, Options, and Recommendations Technical Report No. 20

²⁶ This is so even though broad anecdotal evidence across many countries suggests that low-income households have no higher a default rate than those socio-economically above them.

Table 4.2
Definitions: Low Income and Moderate Income (proposed)

	Low-Income (by law)	Moderate-Income (proposed)
Single person	LE 1,000 per month	LE 2,000 per month
	LE 12,000 per year	LE 24,000 per year
Family	LE 1,500 per month	LE 3,000 per month
	LE 18,000 per year	LE 36,000 per year
Maximum percentage for housing	25%	35-40% (proposed)

At LE 3,000 a month, for instance, current market products would support a LE 75,000 home.

Moderate-Income Households: the case for a revised definition

Numerous sources advised us that there is a substantial body of acceptable but modest housing -- say, fifty square meters -- that can be developed or sold for LE 45,000 to LE 50,000. None of the Housing Lenders is reaching this niche -- the profitability challenge discussed above -- and none of the GSF's current activities benefits this customer group.

The current definition appears to be internally at odds with itself. It caps eligibility at levels that render the customers unreachable by the few entities who would like to move down-market. There would be a substantial ecosystemic benefit in this market segment. To do so would require some combination of the following changes:

- 1. Expand eligibility to LE 3,000 a month. At this level, LE 75,000 homes become feasible.
- 2. Allow higher percentages of income for housing. However laudable in affordability terms, 25% of income is below developed-world standards and undoubtedly well below the levels these households are paying in the absence of assistance. A standard of 30% or even 35% would still be a bargain compared to their unsubsidized alternatives.
- 3. *Incentivize lenders to go down-market to LE 45,000 homes*. Mechanisms to do this without destroying affordability are discussed in 4.2.2 below.
- 4. *Commit substantially more money per household* by increasing the down payment matching assistance. Implications of this are explored in 4.2.1 below.

Expanding the GSF's business plan to include a formally defined Moderate-Income class would give an enormous boost to its product lines, and to the ability of Housing Lenders to expand their reach in recruiting new customers and persuading them to adopt registered title properties and mortgage loans.

Further, even as Low-Income households require Subsidy products, analysis shows that Moderate-Income households likewise would benefit from subsidies, albeit much smaller amounts per customer. The same appropriated funds will go much further to Moderate-Income households.

This Section explores the possibilities.

4.2.1 Subsidize down payments

In terms of pure economics, on their own internal resources, Low-Income Households in Egypt today can afford²⁷ homes whose prices range from LE 22,000 to LE 30,000. This falls far short of the minimum 'profitably mortgageable' house whose price is LE 75,000. Subsidizing down payments by means of a cash grant paid at closing will boost some households into homeownership.

Down payment subsidy: current GSF program

The GSF currently operates a subsidy program with these parameters:

- Cash grant payment.
- The lesser of 15% of purchase price or LE 10,000. (The cap is hit at purchase prices of LE 67,000 and above.)
- Property must be registered or able to be registered within a short period (say, six months).
- Deal flow is sourced through one of three originators: National Bank of Egypt, Taamir, and EHFC.
- The GSF is doing an outreach campaign by telephone and fax.

When the subsidy program was first announced, it attracted enormous attention, but customers rapidly became discouraged as very high percentages of them were disqualified (chiefly because their properties were unregistered). Today, after less than six months pursuing this program, the GSF has issued commitments for just under 300 loans. Customers are disqualified for numerous reasons, including:

- Their incomes are too high to qualify as Low-Income (LE 1,500 per month).
- The property is unregistered and cannot realistically expect to be registered.
- The transaction economics do not work.

Even though the program is now giving away free money, and generating high traffic (8,000 people have inquired already), only one in twenty applicants -- a 5% success rate -- makes it through the screening and secures a commitment.

The GSF is currently operating a subsidy down payment program (see inset box) that represents its principal 'shelf product' in the marketplace. However, this product is having minimal impact (300 loans so far). It does not advance the cause of registration, since it requires the customer to have registration solved or solvable and this applies to very few properties. It is not proving any new concepts for GSF products or services (such as Credit Division initiatives). Its ecosystemic benefits are obscure.

It is expending GSF cash with no ongoing source of replenishment. It is however, helping to monetize the LE 70 million of properties 'in inventory' (an estimated 1,200 flats) that were also part of the GSF's initial endowment. At current rates, it will take only 5,000 homes to exhaust the LE 50 million cash endowment with which the GSF has been seeded. That could be achieved within a year. Even presuming the subsidy program as structured expends the cash to be realized through the sale of inventory homes, it will likely be exhausted within three years, even if is allowed to consume all of the GSF's liquid resources.

In short, the current subsidy program is not sustainable as a business endeavor. Indeed, *any* pure subsidy program is essentially a charitable action -- as such, it must have a benefactor.

²⁷ Assuming LE 1,500 per month of income, market costs of capital (14%, 7 years, self-amortizing), and 20% down payment.

Subsidy Funding Principle: Link volume to annual budget appropriations from the Government of Egypt

Subsidy is a wealth transfer from the benefactor to the target household. Credit Division products can be profitable businesses. Subsidy is inherently charity, and it is never profitable -- it can never be profitable.

Subsidy activities thus expend cash for non-economic (social) impact. This means that they are unsustainable -- cash must eventually run out -- unless expenditures are matched to a beneficent source of receipts.

As a general principle, Subsidy Division products should be funded from renewable sources: (a) GOE appropriations line items or (b) the 'mortgage surtax' (2% of payments) under current law. Activity should be scaled up or down with political commitments as expressed by budgetary funding.

Any other course simply exhausts GSF resources until they are gone.

With some reluctance, we recommend the immediate curtailment, leading to suspension, of the GSF's subsidy program. It is an expensive charity that the entity cannot afford until after it has established a business plan, found a marketplace niche, proven its core concepts (including assembly of appropriate staff), and launched itself on a clear path to sustainability.

A down payment subsidy has potential -- analogs are used throughout the world -- if two conditions are present:

- It is funded through the appropriations process, with program activity linked to appropriations.
- Its deployment levers other resources (e.g. Credit Division products) and actors (e.g. Housing Lenders) to stimulate overall ecosystemic benefit, not just help some deserving households.

While the case can be made for the direct down payment subsidy, we believe a better case can be made for subsidies that use less per customer and gear more outside private-sector resources.

4.2.2 Subsidize or share on loan application costs

As discussed above, from a policy perspective, moving down-market involves several challenges. In addition to buyer affordability (making the house purchase feasible for the target household), the system must also deliver lender profitability (making the origination and administration of a particular loan a profitable business line for the Housing Lender).

Origination costs -- application, loan processing, third-party reports (such as appraisal) -- tend to be fixed sums, invariant of the property's size or its value.

A targeted subsidy or cost reimbursement -- say, 50% of the third-party costs (e.g. appraisal) plus stipulated loan application fees (paid to Housing Lenders upon delivery of a completed and qualifying application) would motivate Housing Lenders to establish counseling/outreach divisions and would at least reduce this particular barrier to activity. The costs per home would be quite low, perhaps LE 1,000 per application.

4.2.3 Initiate a 'Save for your home' down payment matching program

Long before a householder can become a home owner, he must become a saver, which produces several byproducts of great benefit to home ownership expansion:

- Participants accumulate larger down payments.
- Participants demonstrate savings histories (which are the precursor to borrowing histories).
- Participants establish banking relationships and improve their financial literacy.

Throughout the world, governments and housing lenders²⁸ have found that incentivized or user-friendly savings programs attract them new customers and create banking relationships that become a platform to sell a continuous stream of products and services over years and decade.

The GSF could thus sponsor a 'Save For Your Home' program with features like the following:

- Customer establishes savings relationship with Housing Lender.
- Upon achievement of particular savings goals (months, amounts, regularity, accumulated volume), customer is vested with a matching amount (100% match, or less or more) to be used for home down payment. (Match could be varied by income classification and savings rate.)
- Combined down payment must be used to buy a home by accessing one or more Credit Division products (4.1.4 or 4.1.6 are particularly suitable).

Such an approach would harness Housing Lender self-interest, give them a new product to sell, expand their customer base, and create a pipeline of demand. It could be integrated with a supply-driven initiative (for instance, activity 4.3.1 below) to provide support throughout the value chain.

4.2.4 Buy down customers' net interest rate

Previous discussions have established that lowering debt service cost for targeted customers dramatically increases their home-buying power. This can be accomplished in three ways, two of which are Credit products, one a Subsidy:

Table 4.2.4
Ways of lowering debt service cost

<u>Activity</u>	<u>Summary</u>	Type of activity
Lower yield spread	Increase credit ratings through enhancement, so market requires lower spread to a "safe" rate (such as Egyptian treasury issues).	Credit
Increase loan term	Provide credit enhancement to allow lenders to finance terms longer than the very short market terms.	Credit
Buy down interest rate	Provide an interest subsidy, for some interval of time, in some amounts	Subsidy

This last element, the Subsidy product, is of interest here.

Guarantee and Subsidy Fund (GSF): Goals, Options, and Recommendations Technical Report No. 20

²⁸ On its own initiative, Housing Development Bank (HDB) -- whose chair, Dr. Sathi El Sebai, is a GSF board member -- introduced such products a few years back. They proved very successful as a means of attracting customers in an otherwise sluggish real estate market. The programs are still active.

Once again, observe that *Credit Division products make Subsidy Division products more effective*. An interest rate buydown will be intrinsically less if the opening rate (from which the buydown occurs) is made lower by credit enhancement.

The subsidy's mechanics would work this way:

- Housing Lender establishes a target household is eligible ("Eligible Borrower").
- Housing Lender confirms the proposed home to be purchased is an Eligible Property.²⁹
- Housing Lender originates a market-cost loan to Eligible Borrower. Fixed-rate, selfamortizing, with a calculated resulting Gross Debt Service.
- GSF pays Annual Interest Payment ("AIP") directly to Housing Lender each year (month?) provided Housing Lender certifies loan administration remains in compliance.
- Eligible Borrower pays a "Net Debt Service" equal to (a) Gross Debt Service minus
 (b) AIP.
- Any time the AIP changes (per schedule; see below) the Housing Lender notifies the Eligible Borrower of the increased Net Debt Service.

In this manner, the loan is a market instrument (and such loans could thus be bundled and sold in any of the normal ways), the Housing Lender is originating according to normal procedures, and the customer sees a Net Debt Service that is the same monthly payment for a year's interval. Eligible Borrowers would thus become accustomed to stepped increases in their payments at predictable intervals.³⁰

Over what interval, and on what basis, should the interest subsidy be paid? Home purchase in Egypt occurs in an environment where buying households expect to raise their income, and to experience appreciation in home prices. Both factors mean their need for a subsidy declines rapidly after purchase. We thus suggest that a subsidy should be declining, in predictable ways, to extinguishment. Something such as the following:

Table 4.2.4.b
Possible declining interest subsidy

<u>Year</u>	<u>Year 1</u>	Year 2	Year 3	Year 4	<u>Year 5</u>	Year 6
Subsidy	600 bp	500 bp	400 bp	300 bp	200 bp	100 bp

This subsidy, the maximum permissible, would be 21% of the original mortgage amount. Lesser subsidies would be 15% (over five years) or 10% (over four years).

A linear-steps approach would also allow deeper targeting (e.g. six years, 21%) for lower income households and shallower targeting (e.g. four years, 10%) for those at the upper end of the eligibility band.

An interest-rate buydown program of this type would be straightforward to administer, with government contributions known up front and predictable in a budgetary context. Success in the program would encourage greater appropriations funding in future years.

At the same time, interest-rate buydown programs involve greater levels of long-term political risk. If interest rates are variable, the fiscal cost of subsidy is inherently unknown,

Guarantee and Subsidy Fund (GSF): Goals, Options, and Recommendations Technical Report No. 20

²⁹ This means, in effect, deciding whether to finance only registered properties or those unregistered or on their way to registration. Critical here is that the *registration eligibility question is a Credit decision* that should not be made at the subsidy stage. Offering subsidies on property with eligibility criteria different from those used for Credit products merely invites a marketplace schism that would retard the registration initiative.

This approach thus synthesizes a variable payment within the context of a fixed rate loan.

and a subsidy pledge tied to specific loan instruments could be long-term and very expensive. Subsidy products that deliver over time -- such as interest-rate buydowns of any flavor -- expose the subsidizing government to substantial cost risk, especially if the interest subsidy adjusts as markets adjust. Sovereign governments that experience interest rate spikes will find themselves facing contemporaneous spikes in subsidy cost that they may be ill-placed to address.

With basic rates fixed, but Treasury rates volatile, the government could be exposed unless the 'safe rate loans' were then sold via a bond issue (e.g. through the GSF) or otherwise laid off on the investing public. Such programs have a poor track record in developing countries that lack solid control over their fiscal policies and central bank rates.

4.2.5 Reward registration during homeownership

Although improving registration of title is within the overall EFS effort, incentivizing registration is not a stated statutory mandate for the GSF. At the same time, if more properties were successfully registered, the GSF would have a broader market it could pursue.

- 1. Without registration, it's hard to generate proper mortgages, and growing the mortgage market *is* a GSF mandate. There is a symbiosis between registration expansion, GSF growth, and overall housing financial market growth.
- 2. The stakeholder who is making choices (namely the homebuyer) makes a decision that incorporates not just the availability of finance, but the availability of securing a property that is financing-eligible. In other words, if the GSF is the best delivery point for a small-scale product that facilitates housing finance, that expands the market for GSF products and for the products of its customers (e.g. HFCs, land developers).
- 3. A suite of products that incentivizes registration on the front end and provide financial rewards (e.g. lower interest rates) after registration is achieved is in effect a form of 'advertising' or 'loss leader' for the GSF's larger mission, namely the delivery of financial products that stimulate the mortgage market.

Accordingly, GSF financial incentives to reward homeownership build on the interest-subsidy program described in 4.2.4. In addition to a known subsidy schedule, there could be a further and highly desirable feature:

 Presuming that subsidy (and credit enhancement) are being allowed on unregistered properties (either undergoing registration or suitable for registration), offer an increase in the interest subsidy -- a decrease in the customer's net debt service -immediately upon completion of registration.

Such a feature would be both a tangible reward for participation and an enduring spur to achieving it, since the debt service cut would be immediate upon completion. Coupled with similar incentives in a savings product, it would stimulate customer demand and raise customer awareness for the registration effort.

4.2.6 Create a register-into-refinancing program.

Another variant of the rewards-for-registration program would be a two-tier financing offering:

- One tier of loans and subsidies available for unregistered properties.
- Preferred rates, terms, and subsidies for registered properties.

Linking the two would be (1) a unilateral right to prepay the financing on an unregistered property upon completion of registration, coupled with (2) an entitlement to fast-track approval of a new loan. As a practical matter, this could be handled by a refinancing -- indeed, virtually a desk transaction in the office of a Housing Lender -- where the borrower would present evidence of registration completion and then emerge, the same day or some little time thereafter, with a new loan and a lower debt service. Indeed, if properly calibrated, the refinancing would allow debt service savings even as it slightly increased the loan's unpaid principal balance (UPB) by enough to generate a refinancing fee for the Housing Lender.

The mechanics would be exceedingly simple and the incentives aligned, as both homeowner and Housing Lender would be eager to complete the refinancing.

4.2.7 Create a shared-appreciation loan vehicle

A financially more complex approach is to combine the concept of interest rate buydown with the idea of recovery through appreciation later, by creating a 'shared-appreciation loan'. It would have terms similar to the following:

Table 4.2.7 Shared-appreciation loan, conceptual sketch

<u>Provision</u>	<u>Example</u>	Brief explanation
Interest rate	10%	Close to the "safe" (e.g. treasury) rate, not market rate
Contingent interest	50% of Net Equity	Payable on refinancing or sale
Term	10 years or more	Useful to extend beyond market norms, but not necessary

The key here is that *up front*, the interest rate is reduced as part of the loan instrument itself - this provides affordability. Then, *over time*, the lender can recover 'contingent interest' based on a future sale or refinancing of the property.³¹ That in turn can be facilitated by a strong loan-servicing arrangement with a Housing Lender and suitable incentives to refinance (such as in 4.2.5 and 4.2.6 above.)

A second key is being able to place the loans at par (face value). To do this with an attractive rate requires either a direct interest subsidy (4.2.4 above) *or* a strong credit enhancement (4.1.1, 4.1.4, or 4.1.6). Once again, Credit products make Subsidy products work better at lower cost.

Such a program is not without its risks, of which three are particularly evident:

- Tenure duration. Egyptians are used to holding a particular property much longer than their counterparts in other countries, so it could be some significant while before the interest-contingency triggers.
- 2. Monitoring, observing, collecting, and enforcing. The value of a shared-appreciation contingent interest is directly related to the lender's ability to perceive, accurately measure, and collect on borrower financial transactions. With Egyptian housing currently characterized by lack of registration and the pervasive presence of informal buyer-seller transactions, there will be a challenge for the note holders (GSF or otherwise) to create and then to operate appropriate monitoring, assessment, collection, and enforcement mechanisms.

Guarantee and Subsidy Fund (GSF): Goals, Options, and Recommendations Technical Report No. 20

³¹ Collecting the interest requires that the lender be aware of the refinancing or sale. Shared-appreciation thus depends on having either registration or another verifiable means of reliably assuring financial transactions are reported.

3. *Incentives to avoid registration/ reporting*. Such systems will also set up a financial incentive for borrowers *not* to register, not to report. This too must be overcome, perhaps by mandating registration with a discrete (short, 18 month) interval after the loan is made.

Shared-appreciation and contingent-interest programs have proven enormously popular among first-time homebuyers in developed nations (e.g. the United Kingdom). So long as the lending, refinancing, and sale of homes can be tracked, they should work in Egypt.

4.3 Category 3: Operating businesses

Both Category 1 (Credit products) and Category 2 (Subsidy products) are fundamentally *financial interventions*. That is, the GSF would be creating a new form of money program -- a toolbox -- that would be used by other program participants.

The GSF could be more active -- nothing legally precludes it being in business as an actor rather than just a capital source/ financial product originator. One thus could imagine the GSF performing business activities, of which two are worth discussing here.

4.3.1 Co-developer of mid-market homes

Under current law, the Ministry of Housing makes land available (in the New Urban Communities) to developers on favorable terms, in exchange for which the Ministry of Housing secures some number of homes that it then sells (using unmatchable bargain financing) to low-income households. The same current law provides that the GSF may receive similar land from the Ministry of Housing at a price equal to:

Table 4.3.1
Land price formula, conveyance from Ministry of Housing to GSF

- + Land (at zero cost)
- + Trunk infrastructure (at 50% of cost)
- = Land price to GSF
- + Property site infrastructure (at 100% of cost)
- = Total land acquisition cost to GSF

This land-conveyance right is latent -- it has never been used -- but resides in the law and is believed to be available at any time.

Being a co-developer would not require the GSF to be an active or operating partner. A typical ownership/ financial structure would work something along these lines:

- The GSF would form a special-purpose vehicle (SPV) such as a corporation, trust, or partnership entity.
- The GSF would contribute its land into the SPV.
- The SPV would be structured so that a GSF entity ("GSF Sub") was a limited partner or non-controlling shareholder, with an entity to be designed ("Sponsor") as controlling partner or shareholder.
- The SPV would be governed by organizational documents ("Governance") spelling
 out rights and responsibilities of the GSF Sub and Sponsor. These would enumerate
 rights, responsibilities, obligations of the Sponsor, economic sharing, contingent
 rights of the GSF Sub, and so on.
- The GSF would then issue a Request For Qualifications ("RFQ") to developers seeking to be designated as Sponsor. In the RFQ, the GSF would invite

- recommendations on overall development plan, property configurations, costs and sellout prices, income/ expense pro-formas -- in short, the entire development plan.
- The GSF would then select one entity as its proposed partner and enter into an
 exclusive structuring/ negotiating period with that entity, leading either to a closing or
 to a reopening of the Sponsor solicitation.

The significant point here is that the GSF could harness the private sector without itself having to be the operator or to take operational exposure. The GSF would be the financial or asset partner, the developer the operating partner.

Public-Private Partnership (PPPs) of this type have been effectively used by government entities in the US (public housing authorities, the City of Chicago, the Department of Housing and Urban Development, the US military) and the UK (housing associations). The conceptual infrastructure is well developed and representative documents can be obtained.

We have no doubt that the Egyptian financial and developer marketplace is sufficiently sophisticated to embrace PPPs of this type. Indeed, the Ministry of Housing's approach to New Urban Communities demonstrates a less complicated version of essentially the same thing. This raises the question: Are these initiatives for the GSF? Or, if they are worthwhile, should they be pursued instead through the Ministry of Housing?

Certainly it makes no sense for the GSF and Ministry of Housing to be seen as competing avenues by which developers can access land (all of which derives, in the end, from the Ministry of Housing). Therefore, *if* the GSF is to be in this business, it must first establish a partnership with the Ministry of Housing through which the Ministry of Housing endorses both the concept generally and the GSF's activation of it.

Such engagement is far beyond the scope of this report. Here we will observe merely that the concept is valid, potentially promising, and worthy of a substantive dialog between GSF and the Ministry of Housing.

4.3.2 Landlord with property inventory

The GSF owns real property; some of it is residential, but some is commercial. During any period that the GSF owns such property, it should seek income from the property. It could do so directly by forming a management company, or indirectly by engaging a third-party manager.

While there is a case to be made for capturing income from properties, we have difficulty making a case for the GSF to be an active operator. Property management -- leasing, maintenance, and financial accounting -- is a specialized business. In markets where it exists, there is normally a broad supply of commercial firms who can perform the service and who are eager to do so on a contract basis.

Property management capacity is not an essential skill for the GSF, nor does it synergize particularly with other GSF activities. Thus, while we believe it desirable to generate income from non-residential properties owned by the GSF, we recommend this activity be contracted, on a heavily incentivized basis, to an Egyptian professional management company.

4.4 Category 4: Reforming the market

Beyond the activities *it* might undertake, the GSF will benefit from activities others may undertake. We list them here because changes in the following environments would influence the GSF's prospects and occasion changes in its business strategy.

4.4.1 Create a "Financing Choice Law" that requires *all* forms of property financing -- not just mortgages, not just registered title -- to report as such to MFA.

As discussed in the market background, various groups (including land developers and the Ministry of Housing) provide financing for home purchases at nominal rates that are below market. The developers have adopted this approach and entered this business area simply to fill a critical market gap that they need in order to sell their homes. Available evidence suggests their financing terms are reasonable, and also that developers would exit this business if they could.

Consumers benefit when they (1) have choices in financing, and (2) can make informed paired comparisons of financing features. Information should be provided by the financiers themselves.

4.4.1.1 "Home Mortgage Disclosure Act"

Accordingly, the marketplace will benefit if Egypt were to enact a "Home Mortgage Disclosure Act" or "Truth In Lending" statute (or some such name) providing that:

- Any property seller that extends credit to buyers (takes payments over an interval, say anything longer than six months) must provide a Financing Disclosure.
- The Financing Disclosure must contain (1) a cash price alternative, (2) a statement of
 the total financing charges that will apply (the difference between cash price and full
 payment assuming payments are timely made), and (3) a calculation of the effective
 interest rate making the cash price equivalent to the deferred price.
- The Financing Disclosure could also (1) direct consumers to Web sites or other
 materials that would enable them to seek financing from a source other than the
 property seller, and (2) obligate the property seller to cooperate with qualified
 financiers identified by buyers.

There are several goals here:

- 1. Put all forms of financing under the same regulatory requirements whether they are overt or embedded.
- 2. Mandate improvements in transparency and customer choices.
- 3. Encourage creation of new specialist lenders on a level playing field, which over time will enable those who have been reluctant financiers to withdraw from that business if they wish.
- 4. Level the playing field (in terms of rate competition) as among all types of financiers.

Laws of this type are common in developed countries.

4.4.1.2 Mortgage registration surtax payments

Right now, customers who borrow via a mortgage pay a surtax of 2% of the payments (an income stream that will eventually grow and fund the GSF's Subsidy activities). It seems incongruous and counterproductive for the unregistered financial forms to escape this payment, but the expansion of this modest surtax at the same time as a Financing Choice Law would probably create substantial opposition, so this step might be more prudently deferred until the future.

4.4.2 Bring MOH New Urban Community properties into the Financing Choice Law

If property developers are subjected to a disclosure/ option scheme such as the foregoing (activity 4.4.1), then it seems only appropriate for the Ministry of Housing to participate for several reasons:

- 1. MOH is one of Egypt's largest such sellers and is functioning like a land developer.
- 2. Because the Ministry offers property and financing as a package, customers have no ability to choose the former without the latter.
- 3. Home-buyers are also strongly *disincentivized* from refinancing, since to do so will forfeit their bargain interest rate. That keeps these properties from circulating and inhibits the flow of capital and the tapping of equity buildup.
- 4. The Ministry will accumulate an ever-larger book of loan business whose true market value is substantially below its book value. That inhibits its ability to do other essential missions.
- 5. Obscuring the true discounted grant-equivalent of MOH homes makes efficient national budgeting difficult.

It is difficult to offer a public-policy rationale for excluding Ministry of Housing financing from a transparency/ choice requirement. In setting ethical and customer-protection/ choice standards, government should not follow the market, it should lead.

4.4.3 Require New Urban Communities properties to have registered title

As with the reasoning behind the preceding market-reforming possibility, it appears here that the Ministry of Housing ought to be paid to provide good registered title *from inception* (since the properties will be built on previously undeveloped land and deeded out to developers by the Ministry of Housing).

Indeed, the Ministry of Housing could make title registration an obligation that developers would be required to complete before selling any homes.

This would become more attractive for developers and the Ministry of Housing if the GSF then offered a proprietary credit-enhancement product to enable them to finance the resulting homes on better terms, and allow developers to clear their balance sheet.

4.4.4 Make a single national entity the repository of all government-owned homes

If the government is to be in the business of producing homes for sale, or even of reselling homes acquired from various sources, efficiency and anti-conflict principles suggest that a single entity should be the government's sole custodian ("Government Home Agency") of these properties (collectively, "Government Homes"). This way any policies it sets are applied consistently to the entire governmental inventory and customers (both buyers and developers) cannot play one part of the government against another.

Whatever entity ultimately becomes the Government Home Agency should be in a position of establishing intra-governmental prices for homes and land contracts, so agencies that now have such homes (or their loan receivables) on their books can monetize them. In other words, the intra-governmental transaction should be a swap of properties for cash.

The GSF appears a logical recipient/ custodian of such Government Homes:

- Under the terms of its establishment, the GSF was bequeathed cash, owned flats (that it is selling for cash), and an inventory of land-contract loans (secured ultimately by flats).
- 2. The GSF likewise has a statutory entitlement to land on which Government Homes will be developed.
- 3. The GSF will be developing Credit Division products eminently suitable for use in financing Government Homes.

If the GSF is *not* the Government Home Agency, then it should sell its inventory (of both flats and land contracts) to that Government Home Agency as soon as possible, because the GSF is cash-short and liquidity constrained and will have many uses for the money.

4.4.5 Encourage 'market clearing' of the unoccupied inventory

It is a massive paradox that in a country desperate for housing, over 1.0 million homes stand vacant. Moreover, their presence is a significant complicating factor in that if they should move into the market, it could destabilize prices.

Some of the owners of these properties would be willing to sell them, possibly on a steeply discounted basis, if they could secure cash. The GSF could control its acquisition rate by structuring a financial product available only for these purchases, and limiting the number of homes it would buy in any given time period. In effect, a managed offer to the marketplace could create an open-ended source of supply for GSF Credit and Subsidy products.

Of course, before undertaking any program of this kind, significant market research is required to determine what homes were available, at what price ranges they could be acquired, and whether the result would add to the stock of middle-market or low-income housing.

4.4.6 Vacancy or voluntary decontrol on rent control

Like the unoccupied homes, the 'old' rent control inventory represents an enormous overhanging problem for the Egyptian housing marketplace. Specifically, these homes and buildings deteriorate, undermining neighborhood revitalization, and keep out of financial circulation people who otherwise would be market consumers. These households have a rent bargain, it is true, but no ability to accumulate equity, no incentive to renovate their properties, and no exposure to the capital marketplace.

Without seeking to overturn a fifty-year system, one could imagine individual homes and even buildings 'opting out' of old rent control in exchange for a combination of (1) sale to the residents and (2) funds for renovation. This activity could be facilitated by converter-developers who could arrange financing (using GSF Credit products) on a wholesale processing basis. (We understand some old rent controlled buildings in Cairo, when they reach a stage of serious decrepitude, may undergo a developer-buyout with affected residents receiving relocation payments.)

The GSF could encourage this prospect by establishing a conversion-buyout financing program with specified parameters (property types, scale of buildings involved) and allowing developers to locate suitable buildings and secure resident participation.

The prospect of converting renters into home owners, on favorable terms, and with a renovation program in the bargain, might move some buildings out of rent control *before* they collapse or become otherwise uninhabitable. It would also create a new pipeline source of GSF and Housing Lender activity.

4.4.7 Registration fee 'holiday' or 'discount holiday'

To encourage those who own unregistered flats to register them (especially in the demonstration neighborhoods), the Government of Egypt should explore a 'registration fee holiday' or 'discount holiday' -- an interval (perhaps 24 months) in which those who complete registration have their registration costs waived.

If this cannot be accomplished directly, it could be simulated by creating a special "Registration Fee Subsidy" program through which successful registrants receive cash reimbursement of their registration costs. The Registration Fee Subsidy would come from the administering agency and be funded from a budget appropriation.

4.4.8 Professional rental sector

Most large developed markets have a 'professional' or 'permanent' rental sector: an inventory of properties intended to be run as rentals indefinitely. These are owned and operated by people who have made a professional business out of becoming specialists in rental.

A professional or permanent rental sector stands in contrast to amateur or involuntary renters (such as 'buy-to-let' investors in the UK) who are renting merely as a stopgap strategy in anticipation of a future homeownership sale.

Young households often rapidly change their jobs, marital status, household size, and income; the result is rapidly evolving demand for housing and ability to pay for it. Urban societies with substantial economic mobility, such as Cairo, thus benefit from a professional rental sector.

Converting even some of the 1.8 million owned but unoccupied Cairene flats into professional rentals would create flexibility throughout the Egyptian housing financial marketplace. This is not a business for the GSF, nor for any government agency, but rather for the private sector. That said, the appropriate financing vehicles would make it possible for the private sector to acquire blocks of flats. The area is worthy of exploration.

5 Recommendations

5.1 Activities, Products and Services

This report lists sixteen potential GSF activities -- seven Credit, seven Subsidy, and two Operational. All of them have some merit, but the GSF cannot possibly do all of them. Indeed, it must begin by doing a very few of them, as it drives toward proof of concept and sustainability.

Of the activities, five stand out as having the most immediate promise:

<u>Activity</u>	<u>Attraction</u>
4.1.2. Pooled security of land-contract receivables	Offers the opportunity to provide substantial liquidity to important logical wholesale customers, make positive cash flow, and establishment credit enhancement capacity. Can hedge risk by making contributing developers/ housing lenders equity partners through a self-funded mechanism. Builds on success with the Settlement and Guarantee Fund (SGF).
4.1.4. Credit enhancement unregistered loans	Jump-start the business of housing lending, and incentivize registration, by allowing unregistered property access to credit enhancement in exchange for behavioral performance covenants that will bring them into registration.
4.1.6. Create a variable- rate, capped-payment loan	Expand housing choice by introducing rate variability into the Egyptian marketplace while also protecting households against abrupt interest rate spikes that could imperil their affordability. (Predicated on receiving Ministry of Justice confirmation of legality and enforceability under Egyptian law.)
4.2.5. Reward registration through refinancing/ interest rate relief	Couples effectively with 4.1.4 by offering a further subsidy-based financial incentive to successful registrants.
4.2.7. Create shared- appreciation lending	Used the government's lower cost of capital (and credit enhancement capability) to deliver a loan with lower payments, then recoup the implicit subsidy through sale or refinancing. Depends on having an accurate means of tracking activity and capturing proceeds when transactions occur.

Further, of these five, the first two listed are purely Credit products that can go into the marketplace quickly. The others either involve subsidy, predecessor activities, or higher levels of complexity.

We thus recommend the first two as the first activities the GSF should undertake.

5.2 Strategies and Principles

To review and emphasize where the above activities stem from, we summarize eleven strategies and principles the GSF should follow:

Table 5.2 GSF Business Strategy: Recommendations Target the middlemarket The GSF should embrace middle-market housing as a legitimate (indeed, more urgent) sector to target. The reason is that middle-market innovations can be self-sustainable more quickly, and their establishment will create a platform for targeted low-income activities. The reverse is not true on either count.

Financier, not operator

The GSF should focus on creating financial products and services. Business operations are beyond its current capacity and can be considered only after the GSF proves its concept, establishes its core organization, and brings itself to sustainability.

3. Self-sustainability as primary goal

The GSF must establish a clear goal of achieving self-sustainability from its current endowment. All priority activities must move the GSF toward self-sustainability.

4. Wholesale, not retail

As a financier, the GSF should structure its operations on a *wholesale*, not rental basis. Although its beneficiaries are Egyptian householders, its partners and customers will be Housing Lenders, land developers, and other government bodies.

5. One core business: credit enhancement

The GSF's core business should be Credit enhancement of primary instruments issued by other entities. The GSF should charge appropriate fees for its credit enhancement products.

Securitization or bond issuance should be undertaken only as they are integral best-choice executions of the credit enhancement role.

6. First-order products: bond issues

Since there are Housing Lenders and land developers who hold books of business that they would like to liquefy, first-order products of the Credit division should be bond issues, preferably by those lenders with GSF Credit enhancement. (See Activities 4.1.2 and 4.1.4.) This forces the lenders themselves into the capital markets and makes them the primary credit being evaluated.

7. Second-order products: capped rate

As the Credit products become established, the GSF should consider offering a capped-payment loan product (see Activity 4.1.6); again, for a fee. This is a desirable intervention that will broaden the range of Egyptian housing financial products.

8. Subsidy activity tied directly to appropriations

The GSF should adopt as a governing principle that, until it has achieved self-sustainability for at least 24 months, the GSF will undertake subsidy activities only to the extent that appropriated funds are made available from government (or from protected income streams such as the 2% mortgage surtax).

To do otherwise expends a scarce and irreplaceable resource without moving the GSF any closer to self-sustainability.

9. Cease down payment subsidy

The preceding principle implies that the GSF should immediately cease its current subsidy program, or phase it out as rapidly as politically and administratively practical.

10. One core service: subsidy delivery

To the extent that government endorses subsidy as a program, the GSF is well placed to deliver it. But it is predicated on annual appropriations.

11. First-order product: shared appreciation loan

Instead of a down payment subsidy, a shared-appreciation loan will lever GSF resources much farther and offer much greater synergy benefits.

12. Independent of the MFA

The GSF should be independent of the MFA (except that the MFA's chair should sit on the GSF's board); reasons why are set forth below.

5.3 Organizational configuration

If the preceding business strategy is adopted, the GSF's organizational configuration will flow from it.

5.3.1 GSF as independent entity

The GSF has had a curious infancy, first within the Ministry of Housing, then under the aegis of the Ministry of Investment, now linked to the Mortgage Finance Authority (MFA) via a shared chairman.

This is an odd custodianship. The MFA is a regulator, the GSF will be market participant. The MFA has its own set of business activities to develop that bear little or no relation to those the GSF needs to undertake.

Accordingly, we recommend that the GSF be a fully independent entity, with its own dedicated CEO capable of supervising and growing both the Subsidy and Credit divisions.

The GSF's board membership is strong. Members are knowledgeable, diversified, and committed. We recommend only that the board be strengthened by *ex officio* membership of designees of the Ministries of Finance, Housing, Investment, and Justice.

5.3.2 Establish two divisions within the GSF: Credit and Subsidy

Both activities are within the GSF's remit. Both are important.

Although both activities are regarded throughout the world as proper purviews of government, they are functionally separated in every country with which we are aware. That is, whether implemented through governmental department, parastatal, or government-sponsored entity, the delivery channels, organizational configurations, and professional staffs of these two entities run in parallel rather than drawing from the same body of individuals and organizations. They are as separate divisions or even independent companies inside government -- compatible, synergistic on occasion, but operationally distinct and independent.

We thus see the GSF having two arms:

- **Credit Division**. An underwriting-based banking-type function similar to that found in any large financial institution (or, in the US, in state housing finance agencies).
- **Subsidy Division**. A combination of advocacy (within government) and administration (of government budget resources). Administrative roles as found in larger housing-related ministries throughout the world.

Most significantly, *customer interaction with the GSF would be by division*. That is, the Credit Division would have one set of customers (wholesale entities such as Housing Lenders), the Subsidy Division another. Customers (such as developers) who want to access both Credit and Subsidy products would be responsible for doing so via parallel communications; the Credit Division would not internally advocate for Subsidy resources, and vice versa.

5.3.3 Brief functional description of disciplines

Development of a full-scale staffing and budget plan is beyond the scope of this report,³² and is premature unless the GSF ratifies the overall strategy outlined above. Here we will briefly sketch the skills/ job titles likely to be necessary among the GSF's professional staff.³³

³² It is an entirely logical follow-on activity.

5.3.3.1 Credit Division

Should have the following staff of roughly the following professionals:

Table 5.3.3.1 Credit Division professional staff (rough outline)

	<u>Title</u>	<u>Description</u>
1	Managing director	CEO of the division. Establishes new product innovation. Outreach to financial institutions and other potential partners. Reports to GSF aggregate CEO. Serves as interim GSF CEO.
1	Chief underwriter	Establishes all underwriting policy with respect to new and existing products. Periodically adjusts insurance premiums and other market-responsive terms and conditions of GSF Credit Division products. Reports to MD.
2	Underwriter	Analyzes particular property inventories and proposed portfolios for credit products.
2	Financial modeler	Prepares financial models, designs new financial models as required by underwriters and managing director. Populates existing models with property and portfolio information. Prepares financial schedules for inclusion in materials.
2	Property analyst	Analyses financial history and performance of assets (properties, loans, land contracts) under consideration for credit enhancement. Reports to underwriter.
1	Property inspector	Responsible for visits to and reports on condition of land, neighborhoods, properties, prices. Provides photographic written reports of condition. (Most likely, engages and supervises contractors who provide these reports.)
1	Title specialist	Researches title/ registration status of assets.
2	Loan servicing	Handles payment administration on GSF Credit-enhanced properties and portfolios. Collects financial information as required by GSF credit documents. Analyzes performance of existing portfolios. Reports to chief underwriter.
1	Translator	Translates Arabic into English and vice versa.

The staffing configuration listed above is *presuming active operations*. During the development phase, the core team should be the senior executives (managing director, chief underwriter, and financial modeler) supplemented by consulting contractors who provide interim capacity for the remaining positions as appropriate.

5.3.3.2 Subsidy Division

Its staffing configuration is harder to predict, depending as it does on the volume of activity and the type of subsidies being delivered. It could have a staff of the following professionals:

³³ Beyond professional staff, Egyptian companies maintain a support staff of security guards, drivers, and so on, whose numbers seem roughly equal to the total number of professional staff.

Table 5.3.3.2 Subsidy Division professional staff (rough outline)

	<u>Title</u>	<u>Description</u>
1	Managing director	CEO of the division. Establishes new subsidy innovation. Outreach to Housing Lenders and other delivery outlets/ channels. Provides advocacy to affected ministries; lobbies for budget funding. Reports to GSF aggregate CEO.
1	Program administrator	Prepares explanatory brochures, materials, administrative guidance, and internal protocols to handle outreach to customers, inflow of new applicants, and administration of existing contracts.
2	Applicant counselor	Receives requests for subsidy from customers. Processes applications to make initial eligibility/ suitability determinations. Records necessary information and provides counseling to applicants. Reports to program administrator.
2	Subsidy administrator	Disburses subsidy payments according to program guidelines. Reports on property condition (for properties involving subsidy disbursed over time). Reports to program administrator.
1	Translator	Translates Arabic into English and vice versa.

The number of counselors and subsidy administrators will depend entirely on activity volume.

6 Timetable for action

It is better to act rightly than quickly ... but it is also much better to act quickly than slowly, especially when the GSF's work will itself contribute to stimulating and reforming the market for Egyptian housing finance. There is a value in briskness.

At the same time, it is hard for any outsider to assess how long it will take to achieve the establishing and infrastructural assembly required for the GSF to be in any of the business lines listed above. The timetable that follows is thus no more than a sketch of the likely critical-path sequence of events, counting from a Month Zero that represents adoption of a strategic business plan.

<u>Date</u>	<u>Month</u>	Timetable and critical path: GSF development <u>Activity or milestone</u>
Sep-05	0	Adopt strategic business plan. Identify first-mover product introductions.
	1	Begin process of developing operating/ growth plan (see Exhibit 5).
	2	Suspend or phase out the down payment subsidy program.
	3	Audit commercial receivables, determine market value and realizability.
	5	Establish stakeholder working groups on product development.
Mar-06	6	Develop subsidy product concept papers.
	7	Establish legal separation from MFA.
	8	Hire CEO.
	10	Engage Credit financial advisors and product designers.
	11	Complete legal research and secure any legal approvals necessary to first-mover products.
Sep-06	12	Hire Credit division core staff. Commence detailed Credit product development
	14	Present first Credit product ideas to CEO and GSF board.
	15	Approve Credit product ideas.
Mar-07	18	Determine appropriations expectations for subsidy products.
	20	Introduce first Credit product.
Sep-07	24	Place/ sell out first Credit product.
	25	Introduce second round of first product (e.g. second credit enhancement pool.
	28	Place/ sell out second round of first Credit product.
	29	Introduce second Credit product.
Mar-08	30	Introduce subsidy product commensurate with appropriations funding.
Sep-08	36	Achieve operational self-sustainability

By coincidence, this appears to take roughly three years to self-sustainability.³⁴

A set of follow-on actions to implement this strategic plan is provided in Exhibit 5.

_

³⁴ We have not developed a comprehensive budget or costing of the growing GSF based on its staffing and administrative requirements. Such activity is far beyond the scope of this report.

7 Conclusion

The GSF has a historic opportunity.

It is well placed to innovate financial products and services that can generate the economic incentives and activity to give practical energy to the critical initiatives at the core of the EFS project (real estate finance, mortgage lending, and registration).

To accomplish this, the GSF needs to see itself as an independent government entity, tasked with that mission, and with a mandate to pursue Credit products across the middle market first, and then subsidy delivery to the low-income market to the extent the national government wishes to provide budget funding for such work.

List of Exhibits

<u>Exh</u> <u>Description</u>

- 1. Glossary of terms; definitions
- 2. The Egyptian housing financial ecosystem today
- 3. Enabling legislation and regulation affecting the Guarantee and Subsidy Fund
- 4. Taxonomic examination of selected Guarantee and Subsidy Fund business lines
- 5. Potential follow-on actions consistent with these strategic recommendations

C:\WINWORD\A H I\EGYPT\EG GSF REPORT IN PROCESS V1.7 050827.DOC/53

8 Exhibit 1: Glossary of terms; definitions

MOI

1. Acronyms The following acronyms are used generally throughout EFS reporting, and may be used in this report without further citation:

CBE	Central Bank of Egypt
CMA	Capital Market Authority
EFS	Egypt Financial Services Project
EHFC	Egyptian Housing Finance Company
GOE	Government of Egypt
GSF	Guarantee and Subsidy Fund
MOF	Ministry of Finance
MOH	Ministry of Housing
MOJ	Ministry of Justice

Ministry of Investment

2. Credit enhancement

Credit enhancement is a transaction among three parties:

- Issuer. An entity (such as a Housing Lender) originates financial instruments (such as housing loans) which carry with them various risks of default.
- 2. **Surety**. A financially robust party, usually independent from the issuer, who is prepared to strengthen the collectibility of the issuer's instruments through one or more pledges or guarantees (see below)
- 3. *Investor*. A financial market participant who is interested in acquiring the issuer's instruments, provided the surety enhances their credit.

Credit enhancement may take many forms, including:

- Protection against catastrophic loss (last loss insurance).
- Commitment to purchase loans in Substantial Default (as defined).
- Stipulated amount of additional collateral (usually liquid) to be drawn on to cover particular defaults.
- Payment insurance (pledge by the surety to fund a stipulated number of installments should the issuer fail to do so).

3. Ecosystem

Any nation's housing delivery systems — homeownership, rental, or affordable rental — represent a complex and interconnected ecosystem, with individual elements (rules, capital flows, participants) are as creatures operating within the system for their own goals. None of them specifically creates the ecosystem; all of them collectively define it.

Housing finance ecosystems vary in success (how well it addresses housing needs), stability (whether it is rapidly changing), robustness (adaptability to changing circumstances and ability to cope with new introductions), biodiversity (number of diverse elements), and complexity (how many interdependencies among elements).

Seeing the ecosystem as a whole is enormously useful in evaluating it, identifying gaps and challenges, and proposing solutions.

Further discussion may be found at:

http://www.affordablehousinginstitute.org/resources/why ecosystem.html

4. Housing Lender

A *housing lender* is an entity that makes a loan to a house buyer (who becomes the borrower). These loans may be recourse or non-recourse; they may be secured (e.g. by a mortgage or other collateral) or unsecured.

Today in the Egyptian marketplace, the following entities are acting as Housing Lenders:

- 1. Housing finance companies such as EHFC and El Taamir.
- 2. **Banks** who make loans to customers who use the proceeds to buy houses.
- Property developers, who enter into land sales contracts for properties they develop under the New Urban Communities initiative.
- 4. *The Ministry of Housing* under its New Urban Communities development sales set-asides

Although not considered financial institutions, these last two entities are, in all essential elements, are acting as Housing Lenders.

5. Low Income

Under current Egyptian law, a household is considered "Low Income" if:

- It consists of a single person whose income is less than LE 1,000 monthly (LE 12,000 annually).
- It is a family whose income is less than LE 1,500 monthly (LE 18,000 annually).

Income caps are not indexed for inflation; they should be.

Under the Real Estate Finance Law, Low Income families accessing mortgage finance are limited to 25% of their income for housing debt service; such households accessing unregistered or non-mortgaged finance are not so limited. As discussed in the report, the Low Income definition and REFL affordability cap are significantly constraining these households' ability to access mortgage finance and buy homes.

6. Moderate-Income

For this report, we offer a proposed definition of "Moderate-Income" as households that:

- If an individual, have income less than LE 2,000 monthly (LE 24,000 annually).
- If a family, has family income less than LE 3,000 monthly (LE 36,000 annually).

Financial analysis demonstrates that the conventional marketplace does not well serve Moderate-Income households, and under current statutes they are ineligible for GSF subsidies. Yet Moderate-Income households need more than just Credit products, they have a financial need for Subsidy products as well.

7. Public-private partnership

Since quality affordable housing does not exist in economic nature -- it requires government financial resources to close the cost-value gap -- the only remaining avenue lies in the road of public-private partnership.

Public-private partnership is a two-way agreement (government, private partner) that establishes a three-way bargain (government, private partner, customer household).

Public-private partnership is not contracting (thus, the public sector tendering for a private contractor to build apartments, that the government will then own and operate, is contracting, not public-private partnership).

The public sector is not procuring objects, it is entering into a long-term relationship.

- In a contracting model, the public sector thinks of itself as the owner seeking a defined service or product.
- In a partnership model, the public sector thinks of itself as a noncontrolling partner who has leashed an energetic but not very wise and very shortsighted beast to pursue joint objectives.

The government's goal, then, is not the initial bargain but rather a structured set of incentives that work over time -- the reins, if you will.

8. Registration categories

In Egypt today, a particular piece of property (that is, a flat or home) may exist in one of four categories of registration:

- Registered title. Title to the property is properly registered and recorded. The title is recorded with the property, hence any successor lienholder can attach only the equity after the senior title holder. This is the world's traditional format and the only one that is reliably compatible with classical mortgage finance.
- 2. Registered deed. A deed has been registered attesting to a transaction between two names parties, one as seller, and the other as buyer. Deed registration differs from title registration in that there may be many deeds between the same two parties, or many deeds covering the same property, with no automatic method of prioritizing among them.
- 3. Unregistered. Neither a deed nor a title registration has been perfected. In this case, properties are bought and sold based on attested contracts signed between seller and buyer, with the courts acting merely to certify the validity of the signatures involved, regardless of (and indeed, ignorant of) the content of the attested instrument.
- 4. *Informal*. The property has been self-built, probably lacks zoning or building code compliance, and has never been surveyed. Such properties change hands mainly for cash.

Although the aggregate, the *informal* property registration is undoubtedly the largest category, it is not financeable in any commercial sense and is beyond the scope of the EFS project. Among the three formal types, unregistered comprises 93%, registered deed comprises 7%, and registered title comprises 0%. Task 2 of the EFS project focuses on advancing registered title.

9. Securitization

A particular process whereby an entity (the secondary market maker) does the following:

- a. Acquires a bundle of financial assets (typically Housing Loans) from a Housing Lender (the primary market maker or originator).
- b. Issues its own new instrument (the "security") under its own name.
- c. Pledges the bundle of financial assets as principal (but not exclusive) collateral for the new security.

From a public policy standpoint, securitization accomplishes the same essential purpose as credit enhancement -- it enables the primary lender to cash out of its loan portfolio -- but as a significant difference, in securitization the financial instrument comes from the securitizer, whereas in credit enhancement it comes from the primary housing lender. This is a significant difference in terms of risk exposure and the mechanics/ priority of collections/ activity should there be individual loan defaults or broad portfolio-level defaults.

Since the new security is independent of the financial asset bundle, it may have a different rate, term, maturity, and periodic payment. There is thus much greater potential for capital gains on issuance, and the benefits of securitization does not necessarily flow immediately through to the issuing Housing Lender.

10. 'Work-around'

An inferior but functional alternative to a more formal or logical system, invented by the marketplace to enable markets to clear, and accepted by the marketplace as a plausible alternative. Does not prohibit transactions, but by its terms and its limitations influences:

- Their legal form
- Their practical genesis
- Their financial terms

The Egyptian housing market today has Work-arounds in terms of securing property ownership, and in housing finance.

C:\WINWORD\A H I\EGYPT\EG GSF REPORT IN PROCESS V0.9 050730.DOC/57

9 Exhibit 2: The Egyptian housing financial ecosystem today

1. In general

With over 73 million people and over 18 million households, a very large proportion of whom live in Egypt's great cities in mid-rise and high-rise blocks, one would ordinarily expect a burgeoning market in mortgage loans. Yet the mortgage finance industry is in its infancy, behind that of many countries with smaller economies.

The causes are well-documented blockages in Egyptian housing finance -- titling, registration, confiscatory rent control. Not only have these locked up much of that capital, they also have thwarted development of the normal range of professional services and capacities -- housing finance companies, mortgage brokers, appraisers, credit bureaus, and settlement agents -- that would allow a housing financial marketplace to spring rapidly into being. Equally significant, 'Work-arounds' developed in the marketplace allow a system of sorts to function at a level of reduced efficiency. While understandable, this makes harder the task of establishing a more efficient system, as not only must new schemes be put in place, customers (at all levels) must be persuaded to use them.

Appropriately, therefore, the Egyptian government has engaged USAID on a broad four-year Egypt Financial Services (EFS) program (www.egyptfs.com) to advance real estate financing broadly across many areas of activity.

2. Recent developments and the housing marketplace today

A. Property configuration and householder expectations. To state the obvious, Egypt being largely a desert, its principal building material is cement³⁵ derived from local sand. With the extraordinary urbanization taking place in Egypt, the extreme shortage of normally arable land (less than 3% of the total area) and the resulting priority on high-yield agriculture, the natural and continuing result is that Egyptian formal housing³⁶ is, in the main, mid-rise (4-6 stories) and high-rise blocks (6-25 stories) of flats, which have been built in metropolitan Cairo³⁷ for at least a hundred years. It is the preferred and presumed housing configuration among Egyptians and certainly among Cairenes.

The form of physical housing is significant as, when coupled with the relative dearth of financing alternatives, it establishes some 'seeped-in' subconscious biases regarding urban housing. The shell is presumed to be physically very durable, and largely unchangeable. Likely, it is financially durable and inflexible (market blockages discussed below). Thus Cairenes tend to view a particular property as a very long-term, almost family custodial asset, to be occupied -- in the same physical space -- by an expanding and contracting extended family configuration, where in the same flat one may be born, grow up, live in (and come to own), then die (and pass on to one's children).

The physical, financial, and emotional inflexibility of the Cairo market is a striking and distinguishing feature. The degree of attachment to a particular housing cubic -- a space in

³⁵ Of local quality standards rather than international, a source of some concern regarding building durability. Cairo is, however, seismically stable.

³⁶ Egypt, like other developing and rapidly urbanizing nations, has a large informal housing sector that we understand to be not far from slum quality. We visited none of these and thus are unable to comment directly. Slum housing and the management of high-density informal communities is probably a very significant challenge to Egypt, but outside the scope of this report.

³⁷ We did not visit Alexandria, nor the cities between Cairo and Alexandria, but presume the physical configurations are similar.

space, as it were -- is unmatched in our experience except among the Manhattanite residents of New York City (and, as we will see, for much the same reasons).

B. Property marketplace. Four years ago, Egypt was in a recession (it has since recovered and the economy is growing), yet the pace of new construction in greater Cairo, especially of residential property, continued apace. Further complicating matters, a material number of expatriate Egyptians buy housing 'back home' in anticipation of later returning to Egypt. The net result is a massive overhang of unoccupied homes -- estimates range from 1.0 to 1.8 million properties -- despite a chronic housing shortage, and a mismatch between new production (high end, socioeconomic Classes A and B) and the burgeoning demographic need (middle market and especially low income, Classes B and C).

Because of the data/ reporting shortage (see Section 3D below), little precise is known about the location, value, financing, ownership, owner motivations, or probable future absorption of this huge inventory. As such, it represents a huge area of uncertainty which must complicate and potentially destabilize property markets even as they recover.

- **C.** Financial markets. Although Egypt has an active capital market, structured finance as known in more developer nations is in its infancy. Blockages in the real estate financial markets have prevented the development of domestic capital-markets and securitization industries and local expertise. Asset-backed securities (ABSs) have only recently been authorized by law, and the Capital Markets Authority (CMA) is newly established. Further, concerns about the strength of the Egyptian pound and its possible periodic devaluation mean that capital often moves out of pounds and into US dollars in times of uncertainty, affecting liquidity for domestic finance.
- **D.** Cost of capital: yield curve. Egyptian government securities are issued for terms through ten years, ³⁸ with fixed interest rates over the interval. ³⁹ A rough yield-curve table is as follows:

Table 9.2.D Yield curve (interest rates on Egyptian Treasury securities) Maturity 91 days 181 20 years 1 year 4 years 4 years 7 years 10 years days Rate 9,9% 10.6% 11.0% 10.9% 11.0% 11.5% 11.7% 11.4%

Source: AHI compilation of isolated data. No stakeholder was able to point us to any populated or published yield curve.

Although these rates fluctuate, over the last several years they have been trending slowly downward (this despite a rate of inflation that is uncertain⁴⁰ but generally presumed to be higher than the rate of interest, leading once again to downward pressure on the Egyptian pound). There seems to be general stakeholder expectation that rates will stay in roughly the same range for the next year or so.

E. Cost of capital: risk curve. According to information garnered from stakeholders, current Egyptian rates for housing finance loans are in the following ranges:

Table 9.2.E

³⁸ There is a twenty-year instrument, but it is callable in five years, so in practice it is a five-year maturity with a balloon

maturity with a balloon.

39 In general, Egyptian law is unfriendly to variable interest rates -- they are permissible but untested legally and as a result are all but absent in the marketplace.

40 The Egyptian government has because it in the marketplace.

⁴⁰ The Egyptian government has been asserting that inflation is under 6%, but many stakeholders believe it is higher. The situation is exacerbated by what appears to be a significant real increase in the price of residential property in metropolitan Cairo. Alexandria is probably similar but we lack information.

	Interest rates on real estate financial tran-	sactions (generally unregistered)	
<u>Rate</u>	<u>Term</u> <u>Sı</u>	oread over Treasury	Constant
12-14%	3-7 years	500 basis points	21-41% (!)

In addition to the yield curve (a graph with maturity on the horizontal axis and cost of capital on the vertical axis), one can also establish a 'risk curve'. Like the yield curve, its vertical axis is cost of capital, but the horizontal axis is risk,⁴¹ with Treasury securities at the left, followed by AAA bonds, then bonds of lesser quality, then variable-yield instruments, then equities, followed by speculative tangibles, with startup ventures, unsecured equity, and venture capital on the far right.

We lacked resources or data to populate a risk curve, but we observe that fixed interest rates on real property today, at roughly 500 basis points over like-term Treasuries, are probably higher than would normally be expected in a country with a similar underlying configuration of interest rates and inflation expectations. This suggests that the impairments to housing finance are affecting not only the availability of capital, but also its cost.

F. Legal lacuna: lack of registered title to property. We understand from stakeholders that the current registration distribution of *urban* property⁴² (which is the only subject of this report) is as follows:

		Table 9.2.F		
	Registratio	n status of Egyptian urba	n property	
<u>Status</u>	Registered title	Registered deed	<u>Unregistered</u>	<u>Total</u>
Percent of inventory	0%	7%	93%	100%

In the most of the world, a precondition to or parallel develop with efficient housing finance is registration of title -- in Egypt it is infinitesimal.

- **G. Market evolution of 'Work-around' alternatives to registration**. Though the normal methods of owning, securing title to, and mortgage-financing are unavailable to Egyptians, housing finance does not stop -- people have to buy and sell homes, so markets always clear. They do so in Egypt by using 'Work-arounds'⁴³, which we subdivide into three categories: legal, financial, and behavioral
- **G1.** Legal Work-arounds. In this context, a legal Work-around is documentary evidence of a property transaction that both parties generally expect can be enforceable. There are three such present in Egypt today:
 - Registered deeds. A deed (see *Definitions*) is a written evidence, attested by a
 notary or equivalent, of a transaction between two individuals (say, a property seller
 and a buyer). The weakness is that unlike a title, which has a clear hierarchy
 independently verifiable by reference to the property, a deed may not be senior as
 there may be another deed outstanding involving the same party(ies). Registered
 deeds apply to roughly 7% of Egyptian urban property.

⁴¹ A yield curve is in fact a simplified risk curve, with the maturity standing in for a single risk -- interest/ inflation volatility over the interval. Indeed, both are stand-ins for a *yield planar curve*, which would be a three-dimensional object whose variables axes are term and risk, and whose derivative points are a flexible plane of particular capital costs.

⁴² Under Egyptian law and practice, urban and rural property have different registration patterns (perhaps -- and this is entirely speculative -- because rural property is by definition flat and readily surveyable, whereas urban property is predominantly mid-rise/ high-rise and thus a cubic rectangle in space not necessarily anchored on its own discrete plot of land).

⁴³ For a definition, see Exhibit 1, *Definitions*.

- 2. Installment-sale land contracts. Developers who build residential properties have found that to sell them, they must provide seller financing (see G2 below), which they secure with an installment-sale land contract. This legal instrument provides that ownership to the property transfers only upon the last payment. Obviously this significantly impairs the buyer's ability to finance the collateral independently, or to realize any equity buildup during the land contract interval.
- **G2.** Financial Work-arounds. A financial Work-around is a form of capital, not a mortgage or a classical bank secured loan, that finances the sale and purchase of residential property in Egypt. There are at least four such in Egypt today:
 - 1. Cash purchases of home resales. We understand that a substantial portion of the private sales of existing residential property are handled in cash, so that the buyer never engages the housing financial marketplace at all. (Probably the buyer is financing the purchase with pure consumer credit.)
 - 2. **Short-term loans (self-amortizing).** Housing finance companies offer short-term loans (5 to 7 years), fixed-rate interest, self-amortizing over the loan term. (Balloon loans appear to be unused.) The net effect is very high debt service constants (21% to 41%, annual principal anywhere from 7% to 27% above the interest), which means that buying a home consumes a very high percentage of income ... and thus probably retards capital appreciation in properties.
 - 3. **Developer purchase-money financing**. Developers, even with the enormous advantage of land donated by the Ministry of Housing, nevertheless find themselves having to property-bank for the land-contract period (3 to 7 years). Since developers have among the highest yield requirements/ threshold rates, this represents a substantial check on their ability to recycle capital and undertake new properties. Equally striking, from a market perspective, is that developers have been unwilling financiers. They offer flats at a 'fixed price' with 'interest-free' financing that is, in reality, their expected sellout price as financed at a market (or slight below-market) rate. Customers do not necessarily perceive the implicit interest cost -- few of them ask about an all-cash purchase option, as there is no competing capital source -- but they are aware that they will make a series of payments, only the last of which rids them of the developer having a senior security in their property.
 - 4. **Ministry of Housing bargain-rate financing**. The other large-scale 'involuntary' financier is the Ministry of Housing. Under its New Urban Communities initiative, it secures a portion of the flats in a development for low-income usage. ⁴⁴ The Ministry sells these to qualified low-income borrowers at *extremely* favorable rates and terms: 30-40 year loans, with interest at 5-6%. This is equivalent to a hidden grant of at least 25% ⁴⁵ of the purchase price, over and above the favorable purchase price itself. Small wonder that these homes are extremely popular and the supply falls short of the demand. ⁴⁶
- **G3. Behavioral Work-arounds**. The lack of liquidity options in the financial marketplace (a derivative byproduct of both the legal and financial Work-arounds) has the effect of creating a significant number of *behavioral Work-arounds*, which are ways in which Egyptian urban housing consumers behave differently from their socioeconomic counterparts in similar emerging countries (e.g. Mexico, South Africa, Thailand). There are at least four such Work-arounds, of which the first is both behavioral and, more significantly, legal:

⁴⁴ We are told these are often geographically segregated from the remaining development, but that is incidental to the financing issue.

⁴⁵ Calculated using the net present value of a 35 year stream at 6% self-amortization, versus a 9% government cost of capital.

⁴⁶ There is (unverified) anecdotal evidence that these flats in turn trade in the secondary property market, possibly on less-formal arrangements, with the effect of creating a wealth transfer to the lucky first-time buyer.

- 1. **Rent control**. In 1952, the Nasser government enacted⁴⁷ what has proven to be an extraordinarily restrictive form of rent control.⁴⁸ Rents are fixed in *nominal-pound levels* (even the pound has depreciated many-fold in the intervening fifty years), with the result that today, well-located spacious (100 m²) downtown Cairo flats have rents as absurd as LE 16 (that is, \$2.75) per month. Rent control of this virulence is ferociously destructive -- it takes down entire neighborhoods, slowly but implacably --but of interest to us for this limited purpose are its behavioral effects, which are numerous and invidious:
 - a. Very long tenancies. The same law allows families to bequeath their rentcontrolled homes twice -- that is, from parent to child and then to grandchild -which means that a given home can be occupied by the same family for fifty to eighty years. Those who have such homes cling to them and pass them along, leading to very long-lived tenancies.
 - b. Absence of maintenance. Owners completely cease maintaining their properties. Tenants will make only such repairs as protect their homes' interior. Building exteriors thus crumble over time. The mindset of abnegating any sense of ownership responsibility undermines customer confidence in property value.
- Very heavy legal adjudication of property disputes. Property disputes are common, and their legal adjudication is turgid. The result is an enormous strain on judicial resources: as much as 60% of the entire judicial system is occupied with property disputes.
- 3. Retardation of normal permanent-rental stock owned/ operated by professional landlord/ management capacity. A few years back, the rent control law was amended so that 'new law' tenancies are allowed normal market-type rent increases. Nevertheless, there is no permanent rental stock (except involuntary rental from rent control), and consequently no recognized landlord/ property management profession. With so much of the rental stock out of the normal ebb and flow of market movements, the rentable ('new law') stock tends to be owned by individual families and trades on an ad hoc basis.
- 4. **Ministry of Housing direct production**. The Ministry of Housing is today Egypt's largest source of affordable housing -- all of it homeownership, none rental -- a direct production role unusual even for Africa (where large private or public-private developments are becoming more common).
- **G4.** Tabular enumeration of Work-arounds. For convenient reference, we summarize the Work-arounds briefly in the following table:

Guarantee and Subsidy Fund (GSF): Goals, Options, and Recommendations Technical Report No. 20

⁴⁷ The British imposes a wartime rent control from mid-1941 to 1944 (with an overhang for tenancies let during that wartime window), but it phased out after World War II. Egyptian rent control in its current form dates from 1952

⁴⁸ A rent ceiling was first put into law in 1947 and was imposed on properties built before 1944, but incremental raises were possible. Then, beginning with the Law 199 in 1952 and subsequent laws (1952, 1958, 1961, 1965), rents were sequentially *reduced* in a series of 15% or 20%, increments, with fixed rents for premises constructed before 1944. http://www.georgetown.edu/faculty/oweissi/epe/append5.htm.

Table 9.2.G
'Work-arounds' in the Egyptian housing marketplace today

Legal Work-arounds	Financial Work-arounds	Behavioral Work-arounds	
Registered deeds. Recordation of an agreement but not of property title status.	Cash purchases of home resales.	Rent control (and property deterioration). Neighborhood long-term decline and blockages to revitalization.	
Installment-sale land contracts. Developer-held loans where property cannot transfer until the last payment is made.	Short-term loans (self-amortizing). Very high debt service constants, substantial capital locked up.	Very long tenancies (and multi- generational ownership). Likely under-utilization and over- consumption.	
	Developer purchase-money financing. Developers offer 'interest-free' financing over 3 to 7 years.	Very heavy legal administration. 60% of all cases are real-estate- related.	
	Ministry of Housing long-term bargain-rate loans. 30-40 years, 5-6% interest.	No permanent rental stock/ professional landlords. Such small 'new law' stock as is available is handled by individual owners, not professional firms.	
		Ministry of Housing direct production. To plug a gap in the housing production marketplace.	

3. Blockages, challenges, and issues

As may be inferred from the foregoing discussion, the Egyptian housing finance marketplace today faces numerous blockages, challenges, and issues.

- **A.** Limited range of (costly) financial products. Today Egyptian housing finance is a marketplace that sells basically only one product: the short-term fixed-rate self-amortizing loan. (Variations of this product are offered by banks, housing finance companies, and developers.) The following financial products are largely or entirely unknown in Egypt:
 - 1. **Long-term loans**. Maturities longer than 7 years are not readily available⁴⁹ and entirely unavailable in the general marketplace.
 - Financing for individual resales. Such financing as may be taking place is consumer finance.
 - 3. **Purchase-money financing**. Appears absent.
 - 4. **Junior-lien financing**. The presence of a junior lien presupposes a *senior* lien, which presupposes a registered title system.
 - 5. **Equity takeout refinancing**. Apparently absent.
 - 6. **Balloon loans**. Both self-amortizing to term (e.g. 25 year amortization, 10-year balloon) and pure bullet (interest-only to term) loans are unknown.

Guarantee and Subsidy Fund (GSF): Goals, Options, and Recommendations Technical Report No. 20

⁴⁹ For this purpose we exclude Ministry of Housing loans, which are property-specific and do not materially affect the broader financial marketplace.

- 7. **Lease-purchase**. There appears to be no form of rent-to-buy or other equity-building intermediary stage. (Installment land contracts transfer the psychological indicia of ownership but not the legal/ financial indicia.)
- 8. **Home improvement loans**. Not referenced by any stakeholder. Presumably funded through personal savings or consumer finance.

The net result is an unintentional (and largely unperceived) stifling of new financing initiatives, and a very high debt service constant burden for those who *can* tap financing.

B. Registration. Discussed at length above (and elsewhere), this continues to inhibit formation of a normal mortgage capital market.

Roughly ten years ago, two countries -- Indonesia and Thailand -- faced very similar lack-of-registered-title challenges. Each of them undertook lengthy (multi-decade) programs, both of which are only halfway through completion. Yet each shows substantial benefits in housing finance, and (not coincidentally) booming real estate supply markets.

The Thai initiative included:

- Legal reforms.
- A major public awareness campaign.
- Risk mitigation by the Government Housing Bank (GHB; www.ghb.co.th/eng/). In this it may be a forerunner of the GSF's potential role.
- Legal innovation, including lease-purchase, with government administrative and legislative support.
- Significant product innovation by the GHB, including proprietary loan products to complement the legal innovations.

We strongly recommend a bilateral or trilateral peer-to-peer exchange between Egyptian housing finance officials and their appropriate counterparts in Indonesia and Thailand.

- **C. Customer unawareness**. Compared with their socioeconomic peers in similar countries, Egyptian customers are both unaware of the financial alternatives commonly available elsewhere, and seemingly tolerant of the resulting market inefficiencies.
 - Limited mobility, limited property choice. Egyptians accept very long tenancies and limited mobility.
 - Lack of impatience with adjudication systems. The prevalence of property disputes and the absence of substantial complaints about them indicate a very tolerant customer base.

The resulting absence of demand for change is itself a blockage, as it prevents the accumulation of political capital that would enable a modernizing government to convert political desire into political action.

- **D. Data shortage**. Egypt is remarkably deficient⁵⁰ in reliable information of the sort on which capital market thrive, including:
 - Yield curve. None published.
 - **Risk curve**. No readily accessible compilations of different instruments to assess risk premiums.

⁵⁰ Absence of evidence is not always evidence of absence, so there is the possibility that some of the information we list below as 'absent' may in fact exist somewhere in Cairo. Still, none of our sources -- who are among Egypt's housing finance leaders -- were able to provide any useful information on any of these elements, nor did they believe the evidence existed elsewhere. Many sources bemoaned the data shortage.

- **Property price/ transaction histories**. Statistical insights into market price movements are scarce if available at all. (We saw none.)
- Personal credit bureaus. Their development is Task 4 of the EFS engagement.
- National income distributions. Not readily available.
- **Inventory of supply**. As noted above, somewhere between 1.0 and 1.8 million homes are reputed to be sold and unoccupied, but no statistics are readily available.
- **E.** Rent control distorting effect. Though critiquing rent control is not a principal or even a peripheral purpose of this report, we cannot discuss the Egyptian housing market without observing the many ways in which this archaic holdover is distorting or inhibiting markets:
 - **Degrades neighborhoods.** Neighborhoods with heavy concentrations of rent-controlled property steadily and inexorably decline. These include some of Cairo's best-located residential areas.
 - Retards urban revitalization. Properties with high concentrations of rent-controlled tenants become in effect hostage to those tenancies, so they are not renovated until the prospective developer has reached an accommodation -- judicial, financial, or some combination of both -- with the tenant population. This substantially inhibits the flow of capital into urban redevelopment and doubtless contributes to Cairo's congestion. It also probably invites over-consumption of deteriorating homes rather than the buildings' conversion into smaller, modern, more market-responsive flats. Hence it reduces Cairo's appeal as a modern African financial center. Other cities (e.g. Manchester, Liverpool) have shown a striking ability to reinvent themselves for the information 'new urbanist' age through adaptive reuse of their historic, well-located legacy stock. This route is closed to Cairo.
 - Chokes household mobility. Rent control reduces household mobility, and with it
 the more adaptable matching of housing configurations to changing family
 configurations and economic profiles.
 - **Creates non-owner mindsets.** In a rent-controlled property, neither the owner nor the resident feels responsible for the building itself (as distinct from, say, an apartment's interior). This un-interest in housing maintenance weakens the normal owner-improver-wealth-building mindset prevalent in other countries, including many African nations well behind Egypt socio-economically.
 - Makes quality rental housing scarce because there is little if any new rental
 production (the 'new law' allowing decontrolled rents has had far too little time to
 have a restorative effect).
 - *Inhibits household formation*. House-locked families, especially extended ones, have been shown to reduce the rate of household formation.

4. Government activities and initiatives, including the GSF

- **A. Ministry of Housing**. With ownership over all Egyptian land not otherwise accounted for ("the Ministry of Housing owns the desert"), the Ministry of Housing is the single largest governmental factor influencing the state of Egyptian housing markets and Egyptian housing finance, in several ways:
- **A1. Supply management, zoning and use policy**. As the monopoly source of development land in Egypt, with the resulting inherent power to specify zoning, registration, or other requirements on its development, the Ministry of Housing has both an enormous financial asset and the ability to use it to design programs that shape the market. This is already used to some degree (see next point) but the possibilities for constructive use of the zoning/ allocation power are also limitless.

Specifically, there appears to be nothing to preclude the Ministry of Housing from requiring that all new properties developed under the New Urban Communities initiative have, as a condition of their completion and sale, a properly registered title. We have no insight into why the Ministry of Housing is not adopting such a policy today.⁵¹

- **A2. New Urban Communities.** Through its New Urban Communities⁵² initiative, the Ministry of Housing allocates large plots of land to developers at negotiated prices which we infer are below market value. The developers then construct subdivisions -- largely residential, although with retail and commercial mixed in -- for sale to middle and upperincome Egyptian households. This represents a very substantial definition/ boundary on the growth of Cairo, the density and spatial configurations that will result, the use and tenancy thereof, and in general the shape of the city.
- **A3. Production of low-income ownership housing.** In exchange for its in-kind equity contribution (land value) within the New Urban Communities initiative, the Ministry secures a portion of the resulting ready-to-develop land, on which it constructs new blocks of flats for sale to low-income households. Although these areas are geographically distinct from the rest of the New Urban Community, they nevertheless represent at least 70,000 homes per year, a substantial portion (quite probably a three-quarters majority) of all the affordable production in Egypt.

This is a very significant public benefit and public impact, one that can be expected to continue indefinitely into the future, and thus a very important factor to assess when identifying appropriate interventions and uses for the GSF.

A4. Proprietary financing approach. To sell the homes it builds under New Urban Communities, the Ministry of Housing provides its own financing to eligible buyers, which has been reported to us as extremely favorable:

Table 9.4.A

Interest rates on Ministry of Housing purchases
(compared with market)

Rate

Term
Spread over Treasury

5-6%
30-40 years
-300-400 basis points
6-8%

12-14%
3-7 years
+500 basis points
21-41% (!)

Using the Treasury rate as reflective of government cost of capital, these financing rates represent a 25% discount -- in effect, an in-kind grant of one-quarter of the (favorable) purchase price. Compared with market costs of capital, they represent a 48% discount from a 'par' instrument, and the resulting debt service constants are only *one-third to one-fifth* that of market financing.

It should come as no surprise, therefore, that the resulting homes are snapped up by the marketplace. (Apparently the Ministry of Housing does not require the buyer to demonstrate a registered title, nor does it undertake to cause such a title to be registered before sale.) While the transaction is a great result for the households who acquire the homes, it does little to build the larger housing financial ecosystem, and indeed, by offering such favorable terms, it dilutes stakeholder awareness and may contribute to a general perception that housing can never be affordable unless it comes directly from government.

B. Mortgage Finance Authority. A newly created entity established by Law 148 of 2001, the Mortgage Finance Authority (MFA) is in its early stages of development and

⁵¹ The Ministry of Housing is not a counterpart to the Egypt Financial Services engagement. We did not interview any Ministry of Housing executives.

www.nuca.com.eg, web site in Arabic only.

establishment within the financial marketplace. It has positioned itself, understandably and quite properly, as a regulator of mortgage finance, but with the industry in its infancy, there is a shortage of activity for the MFA to regulate. (There are, for example, only two housing finance companies in the nation, EHFC and El Taamir.) Additionally, since mortgage finance itself represents a tiny fraction of the larger marketplace, much of the important housing financial activity -- private transactions, developer-funded installment land contracts, and Ministry of Housing originations -- is outside its current purview.

The MFA is moving forward to develop a proper organizational structure and establishment of its role as the principal regulator of the Egyptian housing financial sector. That appears to be emerging as its principal role, quite probably exclusive for the next several years as the MFA establishes itself, proves concept, and grows its income streams toward sustainability.

The MFA's further evolution is outside the scope of this report except insofar as it may impact on the proper functions, organizational shape, reporting requirements, and future of the GSF.

- **C. Guarantee and Subsidy Fund**. An entity even newer that the MFA, the GSF was established in 2004 as a byproduct of legislative initiatives seeking to accelerate activity and innovation in the housing financial market. Today the GSF has the following resources and configuration:
 - Legislative mandate. Specified by law (Law 148 of 2001, the Real Estate Finance Law, principally Articles 35 and 36) and regulation (Presidential Decree 4 of 2003; see Exhibit 3), "to guarantee and subsidize real estate finance activity ... [and to] subsidize the real estate finance activity in the field of settling the dwellings to low-income brackets through the Fund's assumption of part of the installment amount"
 - Endowment balance sheet. Upon its transfer from the Ministry of Housing, the GSF secured a balance sheet of assets consisting of LE 60 million in cash, LE 70 million in equity value of owned properties (flats with no debt) that it can expect to sell for cash in the near future, and LE 220 million of 'receivables,' apparently consisting of installment payments due to the Ministry of Housing under its New Urban Communities sales. The timing and collectibility of these receivables is in question, as is their potential value if reduced to cash. (Indeed, there is no known vehicle to reduce them to cash readily.)
 - Vested income stream. Under Article 36.1 of the Real Estate Finance Law (Law 148 of 2001), the GSF is entitled to receive the benefits of a surtax (up to 2% of each payment) tacked on to payments under mortgage loans. However, with mortgage finance in its infancy and capturing an infinitesimal share of the market, it will be some time before this income stream gains significant value, and still longer before it can be monetized (via securitization, sale, factoring or otherwise).
 - Capable diversified board. The GSF has an eleven-member board drawn from across Egypt's housing finance sector, with disciplines such as banking, finance, academic research, and government represented. Board members demonstrate considerable engagement with the GSF's goals and objectives.
 - Entitlement to land on favorable terms. Under Article 3.B of Presidential Decree 4 of 2003, the GSF may receive, from the Ministry of Housing, development land on very favorable terms: (1) land itself for free, and (2) infrastructure at only one-half the actual cost thereof. However, as this decree is new and the GSF in its startup phases, this land entitlement right is currently dormant (no transactions have been done or are in process) and unproven (no applications have been made to the Ministry of Housing).
 - A first line of activity. The GSF is currently offering to sell its property inventory to
 qualified buyers, and to provide them with a one-time subsidy (equal to the lesser of

15% of the purchase price or LE 10,000), provided (a) the buyers come up with a 20% down payment, and (b) the property is registered. However, roughly 80% of all applicants are rejected, principally through lack of registered title.

As against the foregoing, the GSF currently lacks:

- Resolution of its future mission and relation to the Egyptian government (see next point)
- Proven business strategy
- Business strategic plan
- Proof of concept of at least one sustainable and expandable business line
- Financially credible vision of sustainability
- Growth path to sustainability
- Executive staff capable of developing the foregoing, especially on the Credit product side.

This report is intended to offer recommendations for all of the foregoing questions.

D. The GSF and its relationship to the MFA. Today the MFA has a certain light 'custodianship' over the GSF. Among the questions at issue in this report is whether the custodianship benefits the MFA, the GSF, or both.

Specifically, a year ago the GSF itself was shifted from residency under the Ministry of Housing to a 'caretaker' arrangement with the MFA under the general auspices of the Ministry of Investment. (The two entities, MFA and GSF, share the same individual as chairman of two otherwise independent boards.) This has occurred even as the MFA itself is defining *its* role in the marketplace and moving forward to develop its own business plan, growth path, and organizational staff.

C:\WINWORD\A H I\EGYPT\EG GSF REPORT IN PROCESS V1.7 050827.DOC/68

10 Exhibit 3: Enabling legislation and regulation affecting the Guarantee and Subsidy Fund

1. Real Estate Finance Law (Law No. 148 of 2001)

Article 2

An authority concerned with Real Estate Finance Affairs shall be established and attached to the Minister of Economy and Foreign Trade. A decree of the President of the Republic shall be issued concerning its formation and determining its powers.

Article 35 [Establishment of the Guarantee and Subsidy Fund]

A Fund shall be established to guarantee and subsidize the real estate finance activity. It shall have the public corporeal personality and shall be attached to the minister concerned. The fund shall subsidize the real estate finance activity in the field of selling the dwellings to low-income brackets through the Fund's assumption of part of the installment amount in a way lowering the finance burden to limits commensurable with their incomes, providing it does not exceed one fourth of the income.

The statutes of the Fund shall be issued by decree of the President of the Republic determining the other powers and jurisdiction thereof.

Article 36 [Sources of Funding for the GSF]

The Fund's resources shall be formed of the following:

- 1. The subscription which the investor and the financier shall equally pay to the Fund as shall be determined in its articles of association, providing it shall not exceed (2%) of the finance installment. An investor, with limited income, shall be exempted from paying that subscription.
- 2. Gifts and donations from within the country and abroad as extended to the Fund and approved by the minister concerned.
- 3. Amounts as allocated to the Fund by the State.
- 4. Proceeds of investing the Fund's property and capital.
- 5. Proceeds of fines ruled by the court or those paid according to the provisions of the present law and its executive statutes.

Presidential Decree No. 277 of 2001 On Public Authority for Mortgage Finance Affairs (MFA)

Article 1

Established shall be a public authority called "The Public Authority for Mortgage Financing Affairs" (Mortgage Financing Authority MFA) as a public corporate person reporting to the Minister of Economy and Foreign Trade. The seat of the Authority shall be the city of Cairo, however it may establish branches in the capital cities of the Governorates.

Article 2

The objective of the Authority is run the real estate financing affairs, overseeing the proper implementation of the Law on Real Estate Financing, following up and controlling the financing activities, working for the development of that activity and taking procedures and measures that ensure the efficiency of the financing market and safeguarding the rights of the market participants.

The objective of the Authority is oversee the mortgage finance affairs and the proper implementation of the Mortgage Finance Law, following up and supervising relevant activities, working for the development of that mortgage market, taking procedures and measures that ensure the efficiency of this market and safeguarding the rights of the market participants

3. Presidential Decree No. 4 of 2003 On the Regulation of Guarantee and Subsidy of Real Estate Fund Activities

Article One [GSF reports to Minister implementing REFL, Law 148 of 2001]

Established shall be a fund called Guarantee and Subsidy of Real Estate Activities Fund as a public corporate person reporting to the Minister authorized to implement the provisions of the Law on Real Estate Finance no.148 of 2001. The location of the Fund shall be the city of Cairo; however, further branches and offices of the Fund may be established in the capital cities by virtue of a decision adopted by the competent Minister.

Article Two

The objective of the Fund shall be to undertake the affairs of real estate financing and guarantee for low-income people, and adopt the measures and procedures that ensure efficient and effective follow-up, and safeguard the rights of the beneficiaries.

Article Three

The Fund, for achieving the envisaged objectives, shall have jurisdiction over the following:

- A) Setting the general policies required for guaranteeing and subsidizing the real estate financing activity in accordance with the provisions of the Real Estate Financing Law.
- B) Taking over land allocated for free by the government for building economical houses provided with public utilities in consideration of 50% the actual cost price.
- C) Coordinating with the Public Authority for Mortgage Financing Affairs (MFA), New Urban Communities Authority, the concerned bodies, and those operating in the activity of real estate financing for the purpose of building new economical houses for low-income people in line with the volume of demand and the available resources.
- D) Preparing the subsidy application forms to be submitted by low-income persons in accordance with the criteria specified by the Executive Regulations, studying such applications, determining the rate of subsidy, and concluding the contracting measures with the relevant beneficiary.
- E) Determining the value and rate of subsidy on basis of the financing premium in a manner that ensures minimizing the burden of financing to the limits that suit low-income people provided said burden will not exceed 25% of the income, taking into account the land value, and 50% of the utilities cost price as part of the subsidy by adding thereto or subtracting there from as the case may be, and concluding the contracting procedures with the beneficiaries.
- F) Laying down, in the Articles of Association of the Fund, the rules and procedures of proving and recognizing the causes of low-income borrowers failure to pay off the real estate financing premiums and the measures to be taken accordingly to ensure paying off these premiums.
- G) Receiving the applications for the assurance of paying off the real estate financing premiums from low-income people who have incidentally failed to pay off these premiums, for a maximum of three premiums.
- H) Setting and preparing the forms of the basic conditions of the applications for obtaining subsidy by low-income people or those failing to pay off the real estate premiums, and preparing and maintaining the records thereof.
- Setting up of a database of the Fund activities.

11 Exhibit 4: Taxonomic evaluation of selected GSF business lines

Α. Category 1: Stimulating the housing mortgage marketplace

Activities in this category have the effect of stimulating the broad housing marketplace, benefiting moderate-income households and enabling additional benefits to be targeted to low-income households. In this these activities are compatible with the overall Task 1 objectives (building housing finance).

In our report, we identify seven such activities:

1.	Credit enhancing lender loans	Provide credit enhancement (in one of several possible forms) to lender-issued loans, enabling them to on-sell those loans directly.
2.	Securitization of lender loans	Acquire large pools of lender land-contract loans as collateral for GSF-issued securities. The classical securitization (as opposed to credit-enhancement) approach; uses principles proven in Egypt in the stock-market Settlement and Guarantee Fund.
3.	Establish a property loan Liquidity Fund	Similar to Activity 1, except as applied to loans on <i>unregistered</i> property, a liquidity funding facility. Very similar to A1 or A2, depending on implementation.
4.	Insure over non- registered property loans	Jump-start the business of housing loans by offering credit enhancement for a new form of proprietary loan product with both economic features and performance covenants.
5.	Default risk revolver	Provide the pooling nexus and administering authority for a member-funded revolving facility that would cover defaults on loans held by property developers. (Analogous to the Settlement Guarantee Fund already established.)
6.	Interest payment cap	Establish a loan product, in concert with banks, developers and HFCs (collectively, "lender", that allows lenders to reset interest annually but protects borrowers against increases in their debt service payments by providing that the GSF will fund costs above a certain stipulated cap.
7.	Equity stakes in startups	Use GSF funds to invest patient capital into targeted organizations whose business models are promising and whose success would facilitate/ expand the housing finance market in Egypt.

As activities A1 and A2 are particularly promising, we expand on them in this exhibit, using a standardized taxonomic screen.

A1. Credit enhancing lender loans

 Activity Provide a form of guarantee or credit enhancement (options listed in Features below)

2. Type of activity

Credit Enhancement.

3. Income group

All, although as a feature the credit enhancement could be limited to loans meeting any desired criteria (size, property price, borrower income).

4. Potential features

See Exhibit 1, *Definitions*, for a definition of *Credit enhancement* and the range of forms it may take.

- "Qualifying Loans" could be defined broadly or narrowly according to choice:
 - Property type (e.g. by square meters, use, or otherwise).
 - Loan size
 - Borrower income level (all, moderate, or low)
 - Property price
 - Registered title, registered deed, or other preconditions on collateral.
 - Stipulated protocols and procedures for loan origination.
- The credit enhancement could also require participating lenders to take various levels of risk themselves:
 - First loss (up to B% of unpaid principal balance).
 - Requirement to have on deposit LE C of capital with the GSF (credit enhancer), to be replenished as drawn to cover defaults. (Such an arrangement could make the facility self-funding among participants.)
- Fees should be charged for the credit enhancement. Typically these are a combination of:
 - Up-front premium (at loan origination/ insurance).
 - Annual premium (for each year the loan is in existence).
- Fees would be specified in each loan but could be changed from time to time for new loans insured.
- Potential demand

Probably High ... but much depends on program parameters.

Demand will be Very Specific as it will come from the participating lenders only. Larger demand will depend on program parameters (as discussed in *Features* above).

6. Uniqueness

The product would be Unique. Indeed, the absence of any form of credit enhancement represents a significant inhibition to the movement of capital into housing finance.

Some of the capital inhibition stems from the lack of registration, but the significant range of 'Work-arounds' being used already suggests that the marketplace is willing to price the risk of lending against unregistered property. Given this, there is likely to be an opportunity to make a profit from the spread between Perceived Risk (very high) and Real Risk (high or perhaps medium).

7. GSF resources

Balance Sheet/ Credit.

Depending on how it is structured (e.g. as a mutual-contribution society), this could generate cash in the short run (and, if the credit enhancement proved profitable, over time).

8. Sustainability Sustainable.

Properly structured, should be Sustainable almost immediately as the credit enhancement would come into being if and only if the relevant housing lenders are willing to participate. This can be pre-subscribed.

9. Consumption rate

If properly structured (and absent systemic failure), the activity should not consume any cash resources. (It will consume a portion, possibly a substantial portion, of the GSF's balance sheet capacity, and thus could potentially inhibit the GSF's ability to enter other activities.)

On the other hand, a credit enhancement facility, if it suffers a run, could wipe out the GSF's capital base, possibly with great rapidity.

10. Additionality Yes.

 Boosts -- jump-starts -- the ability of housing lenders to redeploy their capital.

See also Activity A3, credit enhancement of unregistered loans.

Administrative requirements

Requires adopting guidance to define and create a new program. Appears within GSF mandate.

12. Regulatory requirements

None known.

13. Statutory requirements

None known.

- 14. Unknowns to research
- Level of stakeholder interest in such a program.
- Particular features of a first-order introductory product.
- What level of balance sheet must the GSF commit to make its products acceptable in the financial marketplace?
- What if any administrative requirements are necessary to commence the activity.
- Whether the requisite banking skills can be hired into the GSF staff, and
 whether suitable underwriting/ pricing talent can be secured from the private
 sector (whether domestic or international) to price the credit enhancement
 correctly at inception. This is a difficult balance to achieve.
- 15. Beneficiaries
- · Housing Lenders.
- Consumers (homebuyers) will benefit indirectly if the result is to expand the
 universe of Qualifying Loans, or if the participating Housing Lenders are
 under an obligation (imposed as a condition of their participation in the credit
 enhancement) to pass through interest cost savings.
- 16. Opponents N
- 17. Advantages
- Stimulating market flow of capital is an inherent component on the GSF's mission.
- Properly structured, credit enhancement can be profitable. (The US's Federal Housing Administration, for instance, makes a profit on each of its many insurance products.)
- As compared with securitization, does not require the same intrinsic volume levels to be in business initially.
- 18. Disadvantages
- The GSF becomes exposed (as defined by the credit enhancement parameters) but
- Some other form of credit enhancement could prove superior.

- 19. Risks
- Mis-pricing the insurance.
- Housing Lenders do a poor job of servicing the loans, increasing both probability of default and loss given default.
- · Capacity collapse or failure of a Housing Lender.
- 20. Overall Excellent, in some variant.

Benefits will arise in the Short Term.

A2. GSF securitization of Housing Lender registered loans

1. Activity Issues new securities whose principal collateral is a pool of housing loans on registered properties provided by Housing Lenders.

regional du proportion promissa si ricas

See Activity A1.

2. Type of Credit Enhancement. Same as Activity A1.

3. Income group All, although as a feature the credit enhancement could be limited to loans

meeting any desired criteria (size, property price, borrower income).

Same as Activity A1.

4. Potential Virtually the same as Activity A1. See Exhibit 1, *Definitions*, for a definition of features *Credit enhancement* and the range of forms it may take.

- "Qualifying Loans" could be defined broadly or narrowly according to choice:
 - Property type (e.g. by square meters, use, or otherwise).
 - Loan size
 - Borrower income level (all, moderate, or low)
 - Property price
 - Registered title, registered deed, or other preconditions on collateral.
 - Stipulated protocols and procedures for loan origination.
- Participation in the securitization could also require participating lenders to take various levels of risk themselves:
 - First loss (up to B% of unpaid principal balance).
 - Requirement to have on deposit LE C of capital with the GSF (credit enhancer), to be replenished as drawn to cover defaults. (Such an arrangement could make the facility self-funding among participants.)
 - Obligation to purchase D% of the resulting securities issued. (In
 effect, this participates back to each Housing Lender a diversified
 pool of loans and deconcentrates risk for that lender. However,
 strong Housing Lenders could be wary of participating in a pool with
 others whose portfolio might not be as strong. Complicated interlender tensions will arise.
- Housing Lenders whose mortgage loans were bundled into the security could be obligated to provide portfolio-specific credit enhancement of their own loans as a condition of entry into the pool.
 - Observe that the adjudication of suitable levels of additional security would devolve to the GSF, which could be accused of favoritism in its dealings with participant lenders.
 - This favoritism would be reduced by having issuer-specific securities, but such issuer-specificity reduces the potential diversification benefits.
- As securitizer, the GSF could make spread on the difference between rates on the underlying mortgages and the GSF securities.

Potential demand

Probably High ... but much depends on program parameters.

Demand likely to be Targeted. The securities could well represent an attractive investment for domestic capital sources, as a risk-adjusted alternative to holding Egyptian treasuries or foreign currency.

Larger demand will depend on program parameters (as discussed in *Features* above).

6. Uniqueness

The product would be largely Unique -- unique within the housing sector, rare in the larger capital markets. Early steps toward securitization are moving into the marketplace, facilitated by the EFS project.

7. GSF resources

Balance Sheet/ Credit.

Depending on how it is structured (e.g. as a mutual-contribution society), this could -- probably would -- generate cash in the short run (and, if the credit enhancement proved profitable, over time).

8. Sustainability

Sustainable.

Properly structured, should be Sustainable almost immediately as the first issue could almost be match-funded -- that is, the mortgages are bought credit enhancement would come into being if and only if the relevant housing lenders are willing to participate. This can be pre-subscribed.

Consumption rate

If properly structured (and absent systemic failure), the activity should not consume any cash resources. (It will consume a portion, possibly a substantial portion, of the GSF's balance sheet capacity, and thus could potentially inhibit the GSF's ability to enter other activities.)

On the other hand, Systemic defaults in the mortgage assets could bankrupt the GSF, if it guaranteed its securities, or at the very least ruin its marketplace capacity and policy utility even if they were not guaranteed.

10. Additionality

Yes.

- Boosts -- jump-starts -- the ability of housing lenders to redeploy their capital.
- · Helps build a securitization market, something desirable in its own right.
- 11. Administrative requirements

Same as Activity A1; assembly of internal resources, promulgation of program requirements.

Regulatory requirements

None.

13. Statutory requirements

None.

- 14. Unknowns to research
- At least verbally, interest among primary-lender and government stakeholders appears high. Less well established is capital-markets interest. Securitization is nascent in Egypt.
- · Volume of loans.
- 15. Beneficiaries
- · Housing Lenders.
- Consumers (homebuyers) will benefit indirectly if the result is to expand the
 universe of Qualifying Loans, or if the GSF uses the resulting spread to build
 its own capital base and boost its ability to introduce new products
 elsewhere.
- 16. Opponents

None.

17. Advantages

- Stimulating market flow of capital is an inherent component on the GSF's mission.
- Properly structured, securitization can be lucrative. (The US government sponsored enterprises, Fannie Mae and Freddie Mac, make vast sums via securitization, although their profits are substantially enhanced by an inferred guarantee from the Federal government, and other advantages, that are absent in the GSF case.)
- More ways of being lucrative than Activity 1 (credit enhancement).

18. Disadvantages

- Some other form of credit enhancement could prove superior.
- Requires certain minimum capital size (say, LE 200 million) to interest the capital markets and make the financial engineering cost-effective.
- More complex than Activity 1 (credit enhancement).
- 19. Risks
- Mis-pricing the securities. Under-estimating the portfolio default risk.
- Housing Lenders do a poor job of servicing the loans, increasing both probability of default and loss given default.
- Capacity collapse or failure of a Housing Lender.

Substantially the same as Activity 1.

20. Overall

Excellent, in some variant.

Benefits will arise in the Short Term.

B. Category 2: Moving low-income households into homeownership

Activities in this category have the effect of assisting the low-income marketplace; this set of activity is more developed and focused than stimulating the broad market in several ways:

- It builds on middle-market initiatives such as efficient capital finance and a functioning range of government risk mitigation/ credit enhancement interventions.
- It uses *subsidies* to life the buying power of the target population subgroup.

In our report, we identify seven such activities:

1.	Subsidy down payments	Provide cash grants to eligible borrowers who are acquiring eligible property. An activity the GSF is currently undertaking with limited success.
2.	Share loan application fee costs	Fund a portion of the application fees Housing Lenders charge Low-Income borrowers to originate new loans. Goal is to lower the information barrier to application.
3.	Match down payment savings	Initiate a 'save for your home' program whereby eligible customers who undertake and complete a fixed savings period receive a pound-for-pound match of their savings if applied as down payment on a qualifying loan.
4.	Buy down borrower interest rates	Provide an interest subsidy, for some interval of time, in some amounts (possibly declining), to lower the borrower's out-of-pocket debt service payments, especially in the early years.
5.	Reward registration during ownership	Incentivize registration with an interest rate reset (downward) immediately upon completion of registration. Requires
6.	Create a register- into-refinancing program	A variation of the previous activity, in this one an owner who holds an unregistered property with a non-mortgaged loan would be eligible to refinance it lower rate, revaluation of property, preferred terms upon completion of registration. This not only rewards registration but creates some ability to offer variable-rate loans even within the context of predominantly fixed-rate lending.
7.	Shared- appreciation lending	Originate a loan with an interest rate much closer to the safe rate, and a yield recovery captured as a portion(say, 50%) of the appreciation in a property over time.

As one of these -- shared-appreciation lending -- appears of particular interest (and challenges), we provide an expanded taxonomic evaluation of that activity.

B7. Shared-appreciation lending

1. Activity

Offer (either directly or more probably, through Housing Lenders) a 'shared-appreciation' loan with two new features:

- a. Its interest rate approximates the 'sovereign rate' -- the government's cost of capital (e.g. 9%) -- instead of market (e.g. 14%).
- b. Upon the property's sale or refinancing, the lender (or GSF) would receive 'contingent interest' equal to a portion (say, 50%) of any appreciation
- 2. Type of activity

A **Subsidy**, with two unusual features:

- a. The amount of subsidy paid out probably represents foregone yield spread rather than actual cash outlays. (That is, the GSF would be lending at the government rate, foregoing the profit potential associated with the current risk curve, as opposed to having to make actual outlays to pay subsidies to beneficiaries.)
- b. There should be a *recovery* when properties sell and the lender captures 50% of the appreciation. (The economic collectibility of this depends on having good information/ tracking and will improve with registration of title.)
- Income group

Those eligible for the program, but intended for Low Income.

- 4. Potential features
- a. Program definition. The program would be defined by Loan Purchase Eligibility. That is, the GSF would announce it is prepared to buy, at par, loans meeting the Shared Appreciation Eligibility Criteria (SAEC). The SAEC would specify (i) who is a Qualifying Buyer (e.g. income or assets cap), (ii) what is a Qualifying Home (e.g. price cap), (iii) what is Qualifying Security (e.g. registered title, registered deed, installment land contract, or something else), (iv) what is a Qualifying Loan (e.g. in addition to Qualifying Security, it must have stipulated term, interest rate matching Egyptian Treasury, payment rate), (v) what is an Appreciation Event (when contingent interest must be paid) and how contingent interest is calculated, (vi) who is an Eligible Lender, and (vii) how an Eligible Lender would place a Qualifying Loan with the GSF. The SAEC Loan Term Sheet would thus become not only a form of administrative guidance, but also in effect a selling brochure that Housing Lenders could use in attracting clients.
- b. The GSF funding its loan purchases. Presumably the GSF would fund its purchases of Shared Appreciation Loans through a bond issue or securitized instrument. The significant point here is merely that Shared Appreciation Loans will benefit from the mid-market initiative of a GSF funding capability.
- c. Appreciation and Contingent Interest. Conceptually, both sale and refinancing of an existing home should trigger the contingent interest. In practice, this may be complex, since Egypt currently lacks (i) the legal reporting requirements that would automatically surface the relevant information, (ii) the electronic information systems to make the data capture routine, or (iii) a customer awareness or orientation to refinancing as a value event. Nevertheless, the existence of a contingent interest program would motivate the GOE to develop the same. (Moreover, it would also create a business opportunity for intermediaries who would become loan servicers/ asset managers and who could be paid incentive compensation based on collections.)
- d. Fees to the GSF. The GSF could also charge a placement fee (say 2% of each loan, up-front, folded into the loan amount) as a means of generating revenue for its ongoing activities. This would be separate from any profits/ spread on the bond issuance/ securitization.

5. Potential demand

High. Allowing affected customers access to capital at 9% instead of 14% -- that is, at the 'sovereign rate' or a close approximation -- will increase their buying power 20-40% (depending on down payment capacity) and bring another several million households into homeownership bankability.

Demand will be **Targeted** to Low Income eligible households whose income is above certain minimum economic feasibility thresholds.

6. Uniqueness

Utterly unique.

Moreover, this product would be proprietary in the sense that no other lender would be likely to enter the space unless it was willing to accept the sub-market profitability inherent in on-lending without a spread.

7. GSF resources

Government imprimatur and mission. This is the most important criterion.

Balance sheet (and bond issuance/ securitization capacity).

8. Sustainability

Sustainable from inception.

Consumption rate

Will not require new capital but may require **balance sheet growth.** The growth could be accomplished internally (profits from the activity) or through a subscription-based participation among Housing Lenders.

Further government support for GSF instruments would obviate the need for balance sheet growth, but seems inconsistent with the GSF's establishment as an independent entity.

10. Additionality

Yes, additionality in the form of new and incremental volume for the bond issuance capacity.

Likelihood of encouraging other Housing Lenders to offer similar products to the mid-market, probably not at such a low spread to the sovereign rate.

11. Administrative requirements

As this will be a whole new line of business, the principal changes will be in staffing required to develop the product, partner relationships with interested originating lenders, and proper disclosure to eligible borrowers.

Once a book of loan business is established, the major challenge will then be to create effective monitoring/ reporting/ collection systems that do not subvert the larger national goals of registration, formality, and transparency.

Regulatory requirements

Clarification that the participation does not constitute impermissible variable-rate interest and comports with Egyptian law. We presume this can be obtained through regulatory avenues (e.g. a Presidential Decree) rather than requiring legislation.

Local Egyptian counsel should research the issue and provide written advice.

Statutory requirements

See preceding comment.

14. Unknowns to research

How will customers perceive the product? How broad will be its demand?

Will Housing Lenders want the product? Does it compete with their established lines or cannibalize their existing customer bases? Will they be able to differentiate it in their suite of products, and will they take it up reluctantly, tepidly, or enthusiastically?

Focus group and survey research appears appropriate and warranted before proceeding to a heavy product-engineering stage.

15. Beneficiaries

a. Low Income households who become first-time home buyers.

b. Housing Lenders.

16. Opponents

None.

17. Advantages

- a. This is a product innovation, an activity that the GSF logically could lead.
- b. It is a *market stimulant* in that the GSF would be moving into a space for reasons other than to make a short-term profit.
- c. The GSF would be deploying its government imprimatur to create a market structure and encourage stakeholder (both households and Housing Lenders) to participate.

18. Disadvantages

- a. Offering a bargain-element product (as this will probably be perceived)
- b. Advancing a new product that requires customers to change their awareness risks having the customers reject not only the message but also the messenger.
- c. Deploying capital in this way with lower current return has an opportunity cost (in reducing balance sheet flexibility) unless the loans can then be onlent or packaged via a securitization or GSF bond issue.

19. Risks

- a. Subsidy products that deliver over time -- such as interest-rate buydowns of any favor -- expose the subsidizing government to substantial cost risk, especially if the interest subsidy adjusts as markets adjust. Sovereign governments that experience interest rate spikes will find themselves facing contemporaneous spikes in subsidy cost that they may be ill-placed to address. With Egyptian basic rates fixed, but Treasury rates volatile, the government could be exposed unless the 'safe rate loans' were then sold via a bond issue (e.g. through the GSF) or otherwise laid off on the investing public.
- b. Additionally, the value of a shared-appreciation contingent interest is directly related to the lender's ability to *perceive*, accurately measure, and collect on borrower financial transactions. With Egyptian housing currently characterized by lack of registration and the pervasive presence of informal buyer-seller transactions, there will be a challenge for the note holders (GSF or otherwise) to create and then to operate appropriate monitoring, assessment, collection, and enforcement mechanisms.
- c. Such systems will also set up a financial incentive for borrowers *not* to register, not to report. This too must be overcome, perhaps by mandating registration with a discrete (short, 18 month) interval after the loan is made.

20. Overall

Excellent to Outstanding, but with higher than normal risk.

Short for initial marketplace impact. **Long** for eventual recoupment of foregone revenue.

C:\WINWORD\A H I\EGYPT\EG GSF REPORT IN PROCESS V1.7 050827.DOC/82

12 Exhibit 5: Potential follow-on actions consistent with strategic recommendations

Activity

Description

 Populated ecosystem and ecocensus Develop a full description of the elements comprising Egyptian housing finance today. An example may be found at http://www.affordablehousinginstitute.org/resources/ecosystems.html. Any nation's housing delivery systems — homeownership, rental, or affordable rental — represent a complex and interconnected ecosystem, with individual elements (rules, capital flows, participants) are as creatures operating within the system for their own goals. None of them specifically creates the ecosystem; all of them collectively define it.

Housing finance ecosystems vary in success (how well it addresses housing needs), stability (whether it is rapidly changing), robustness (adaptability to changing circumstances and ability to cope with new introductions), biodiversity (number of diverse elements), and complexity (how many interdependencies among elements). Seeing the ecosystem as a whole is enormously useful in evaluating it, identifying gaps and challenges, and proposing solutions.

 Historical records, realtime updates Develop a centralized (and public) historical record, since the 1952 revolution of Egypt's financial performance in key housing metrics:

- a. National. Population, urbanization.
- b. Financial/monetary. Exchange rate, CPI, safe interest rates.
- c. *Housing*. Housing finance rates, rent control inventory (number and price) prices of flats (by type).

Develop means of publishing this information electronically and adding to its body of knowledge. Would have considerable utility among government ministries, domestic and international capital sources, and donors/ social investors.

 Detailed product development, Credit products Develop rigorous financial models to quantify the volume and price the risk of priority Credit products:

- a. Pooled developer-funded land-contract receivable bond issue (Activity A2 in the report).
- b. Loan insurance (pooled funding) on unregistered property, with borrower performance covenants (Activity A4 in the report).
- c. Registration-reward financing with interest rate drop/ rescheduling/ refinancing of principal (Activity 4.2.5 in the report).
- d. Shared-appreciation loan products (Activity 4.2.7 in the report).

 Financial product focus groups Form two sets of groups to develop GSF product ideas from initial sketch (in this report) to working 'red herring' or similar functional descriptions. Manage those two groups to product introductions.

- a. *Internal working group* comprised of GSF staff, board, and contractors to develop financial models, legal descriptions, and product term sheets for priority Credit products (see Item 2 above).
- b. External stakeholder focus groups comprised of customers, users, regulators, investors/ capital sources, and funders, to comment on (and lend insight to) proposed Credit products.
- Yield curve/ risk curve development

Develop both static (data tables) and dynamic (accessible on-line from real-time sources):

- a. Yield curve. Interest rates for safe securities over different maturities.
- Risk curve. Interest rates for like-term real estate securities of different risk profile from safe (GOE) to speculative (unregistered property resales).
- Quantify unoccupied sold inventory

Develop both reliable statistics on and cohort-differentiated descriptions of the 1.8 million (or so) sold but unoccupied flats in the Cairo metropolitan area.

A critical element of a populated ecosystem (see Item 1 above).

 Peer-to-peer exchanges with similar countries Create peer-to-peer exchanges where the market leaders in Egyptian housing finance ("HF Leaders") travel to like-situated countries for direct exposure to the operations of similar entities.

- HF Leaders would include (a) housing finance companies, (b) selected staff at the Ministries of Housing, Investment, and Justice, (c) MFA and GSF staff.
- Candidate countries include: India, Indonesia, Kenya, Mexico, South Africa, Thailand, and Turkey.

This could be further expanded to consider best-practice peer-to-peer engagements with mortgage originators in the US and UK.

 Operating/ growth plan Expand and extend this strategic business plan into an Operating and Growth Plan (OGP), covering the next three-to-five years, that would include:

- Product line rollouts and timetables.
- Product line income productions, balance sheet growth, loan loss reserves, and pricing mechanisms. Would include loan loss reserve buildup and loss mitigation strategies.
- Organizational growth, projected budget/ staffing requirements, and projected income (net of reserves).
- Sequential decision points (contingencies and responses).

GSF Web site

Develop a Web site, in both Arabic and English, that serves not only to introduce the GSF to the Egyptian public but also to serve as a public-information resource for housing customers.

Examples (both governmental and private) from international experience include:

Malaysia: http://www.cagamas.com.my/

Mexico: www.shf.gob.mx.

South Africa: www.finmark.org.za.

Thailand: www.ghb.co.th.

United Kingdom: www.housingcorp.gov.uk. United States: www.knowledgeplex.org.

C:\WINWORD\A H I\EGYPT\EG GSF REPORT IN PROCESS V1.7 050827.DOC/85